

c  
c76asH  
1918/19

**CATALOG**  
  
OF THE  
  
**CONNECTICUT**  
**AGRICULTURAL COLLEGE**  
  
**STORRS, CONNECTICUT**



**ANNOUNCEMENTS FOR 1918-19**

UNIVERSITY OF CONNECTICUT

JUN 28 1962

LIBRARY

HARTFORD  
PUBLISHED BY THE STATE  
1918

PUBLICATION  
APPROVED BY  
THE BOARD OF CONTROL

## HISTORICAL SKETCH OF THE CONNECTICUT AGRICULTURAL COLLEGE

---

In January, 1881, the Connecticut General Assembly established the Storrs Agricultural School, an institution which had its beginning in the public spirit of Augustus Storrs and Charles Storrs, his brother, natives of the town of Mansfield, where the school was located. The object of the school, as stated in the act establishing it, was the "education of boys whose parents are citizens of this state in such branches of scientific knowledge as shall tend to increase their proficiency in the business of agriculture."

A period of growth and development followed, in which the name of the institution was changed to Storrs Agricultural College and in which the board of trustees admitted young women, providing for them education in such branches of knowledge as tend to increase proficiency in the arts of house-keeping and homemaking.

As a college, this institution fell heir to federal income, proceeds from the land-grant act of 1862 and the Morrill act of 1890; became responsible for half the agricultural experiment station work in this state, for which annual provision had been made by the Hatch act of 1887; and found itself under moral and legal obligations to maintain the standard and the scope of education appropriate to the land-grant colleges, one of which by the acceptance of the federal support it had become.

The name Storrs Agricultural College was believed to be misleading. It seemed to designate a private institution. Therefore, to make manifest to all who might see or hear its name that this is a state institution, maintained by, and designed and conducted for the benefit of all citizens, its name was changed by the General Assembly to Connecticut Agricultural College, the name it now bears.

## STORRS AGRICULTURAL EXPERIMENT STATION

---

The Storrs Agricultural Experiment Station was established by act of Congress approved March 2, 1887, and accepted by resolution of the General Assembly, May 18, 1887. By order of the trustees it is a department of the agricultural college.

The purpose of the experiment station is the promotion of agricultural science by investigation and research, and by making experiments whose results may render practical and efficient aid to the farmers of the state in the pursuit of their calling.

As authorized by law, the station issues a biennial report and frequent bulletins. The latter are now printed in editions of ten to fifteen thousand. These reports and bulletins are free to all residents of the state upon application, and to others so far as the supply will allow.

# The Connecticut Agricultural College

---

## BOARD OF TRUSTEES

The Governor of Connecticut .....Ex-officio  
MARCUS H. HOLCOMB, Southington

### Appointed by the Governor ..... Term Expires

JOSEPH W. ALSOP, Avon .....	1921
CHARLES E. LYMAN, Middlefield .....	1921
E. KENT HUBBARD, Middletown .....	1921

### Appointed by the Senate

E. STEVENS HENRY, Rockville .....	1919
CHARLES E. LYMAN, Middlefield .....	1919
IVERSON C. FANTON, Westport .....	1919

### Elected by the Alumni

OLCOTT F. KING, South Windsor .....	1919
HARRY G. MANCHESTER, Winsted ....	1921

### Elected by the Board of Agriculture

EVERETT E. BROWN, Pomfret Center ..	1918
-------------------------------------	------

### Officers of the Board

The Governor, MARCUS H. HOLCOMB .....	President
HARRY G. MANCHESTER .....	Vice-President
OLCOTT F. KING .....	Secretary
RAYMOND I. LONGLEY .....	Treasurer

### Experiment Station Committee

J. W. ALSOP, C. M. JARVIS, E. S. HENRY

### Extension Committee

O. F. KING, C. E. LYMAN, E. E. BROWN

### Administration Committee

H. G. MANCHESTER, O. F. KING, E. K. HUBBARD

# Officers of Instruction and Administration

---

## FACULTY

CHARLES LEWIS BEACH, B. Agr., B. S.  
President

### INSTRUCTORS IN ORDER OF SENIORITY IN SERVICE

CHARLES AUGUSTUS WHEELER, M. A.  
Professor of Mathematics

HENRY RUTHVEN MONTEITH, A. B.  
Professor of History and English

EDWINA WHITNEY, Ph. B.  
Instructor in German and Librarian

HARRY LUCIAN GARRIGUS, B. Agr.,  
Professor of Animal Husbandry, Farm Superintendent

GEORGE HERBERT LAMSON, Jr., M. S.  
Professor of Zoology and Geology

JOHN NELSON FITTS, B. Agr.  
Professor of Mechanic Arts

WILLIAM MERRILL ESTEN, M. S.  
Professor of Bacteriology

ALVA TRUE STEVENS, M. S.  
Assistant Professor of Vegetable Gardening

BURT KIMBALL DOW, V. S.  
Lecturer in Veterinary Science

HOWARD DOUGLAS NEWTON, Ph. D.  
Professor of Chemistry

SHERMAN PRESTON HOLLISTER, B. S. A.  
Assistant Professor of Pomology

JOHN LEROY HUGHES, A. M.  
Instructor in Chemistry

WILLIAM FRANKLIN KIRKPATRICK, B. Agr.

Professor of Poultry Husbandry

JERAULD 'ARMINGTON MANTER, B. S.

Instructor in Zoology

WILLIAM L. SLATE, Jr., B. S. Agr.

Professor of Agronomy

ANNA MARY WALLACE, Ph. B.

Instructor in English and Elocution

GEORGE CLEVELAND WHITE, A. M.

Professor of Dairy Husbandry

ALBERT ERNEST MOSS, M. F.

Instructor in Forestry

DAVID EDMUND WARNER, B. S.

Instructor in Poultry Husbandry

EDMUND WARE SINNOTT, Ph. D.

Professor of Botany and Genetics

GEORGE SAFFORD TORREY, A. M.

Instructor in Botany, Secretary

GLENN HAROLD CAMPBELL, B. S. Agr.

Publicity Editor

CHIRSTINE JENNIE MASON

Instructor in Bacteriology

THEODORE HILDRETH EATON, Ph. D.

Professor of Agricultural Education

GUY CARLETON SMITH, Ph. B.

Professor of Agricultural Economics

HUGH BRUCE PRICE, A. M.

Instructor in Agricultural Economics

JOHN ALBERT KUELLING, B. S.

Instructor in Dairy Husbandry

ARTHUR GUY SKINNER, B. S.

Instructor in Animal Husbandry

HEBER MICHEL HAYS, Ph. D.  
Instructor in English and French

COLONEL JOHN S. PARKE  
Professor of Military Science, Commandant

M. ESTELLA SPRAGUE  
Professor of Home Economics

BEN. C. HELMICK, M. S.  
Instructor in Agronomy

ELLA JOY ROSE, B. S.  
Instructor in Home Economics

EDITH MASON, B. S.  
Instructor in Home Economics

GEORGE W. FRASER  
Instructor in Floriculture, Superintendent of Grounds

HARRY B. ALGER, B. S.  
Instructor in Dairy Husbandry

---

### OTHER OFFICERS

REV. MARSHALL DAWSON, B. D.  
Chaplain

GEORGE A. BLAKE  
Superintendent of Buildings

RAYMOND I. LONGLEY  
Treasurer and Purchasing Agent

STELLA M. FINDLAY  
Manager of Boarding Department

MARY A. DRISCOLL  
Resident Nurse



## FACULTY COMMITTEES

### Course of Study—Agriculture—Science

Professors Slate, Kirkpatrick, White, Lamson, Eaton.

### Course of Study—Mechanic Arts

Professors Fitts, Wheeler, Newton.

### Course of Study—Home Economics

Professor Sprague, Misses Rose and Mason

### Publicity

Mr. Campbell, Professors Smith, Lamson, Eaton.

### Administration

Professors Slate, Wheeler, Kirkpatrick

### Social Affairs

Professor Sinnot, Mr. Manter and Miss Wallace.

### Student Employment

Professors Stevens, Garrigus and Kirkpatrick.

### Athletic Council

Messrs. Edmond, Hughes, Warner, and Professor Wheeler.

### Students Advisors

For Freshmen, First Year School and First Year Special  
Students, by appointment at the time of registration.

For others, the heads of the respective departments, according  
to the student's group selection.

## EXPERIMENT STATION STAFF.

E. H. Jenkins, Ph. D., Director.

\*G. H. Lamson, Jr., M. S. Zoologist.

H. D. Edmond, B. S., Chemist.

\*W. F. Kirkpatrick, B. E., B. Agr., Poultry Husbandman.

L. E. Card, B. S., Assistant Poultry Husbandman.

L. F. Rettger, Ph. D., Bacteriologist, Poultry Investigations.

\*W. L. Slate, Jr., B. S. Agr., Agronomist.

\*B. C. Helmick, M. S., Assistant Agronomist.

\*G. C. White, B. S. A., A. M., Dairy Husbandman.

\* . . . . . , Assistant Dairy Husbandman.

\*Division of time between instruction and experimental work.

## EXTENSION SERVICE

- H. J. Baker, B. S., Director.  
I. G. Davis, B. A., County Agent Leader.  
A. J. Brundage, State Club Leader.  
Helen Bolan, Assistant State Club Leader.  
Roy E. Jones, Poultryman.  
William A. Rhea, M. S., Dairyman.  
B. A. McDonald, B. S., Assistant Farm Management Demonstrator.  
Maud E. Hayes, A. M., State Home Demonstration Leader.  
M. Estella Sprague, Home Economics Director, U. S. Food Administration.  
Guy C. Smith, Ph. B., Field Agent in Marketing.  
Glenn H. Campbell, B. S., Publicity Agent.  
\*A. G. Skinner, B. S. A., Sheep Specialist.  
\*S. P. Hollister, B. S., Horticulturist.  
Dorothy S. Buckley, Ph. B., Emergency Ass't State Home Demonstration Leader.  
D. G. Sullins, B. S., Pig Club Agent and Swine Specialist  
. . . . . Farm Management Demonstrator.  
L. A. Bevan, B. S., County Agricultural Agent, Fairfield County.  
Gladys B. Green, County Home Demonstration Agent, Fairfield County.  
Helen Irene Weed, B. S., Emergency Home Demonstration Agent, Fairfield County.  
Marion E. Dickenson, Emergency Home Demonstration Agent, Fairfield County.  
L. M. Johnson, B. S. County Club Leader, Fairfield County.  
E. A. Brown, B. S., County Agricultural Agent, Hartford County.  
R. H. Barrett, Assistant County Agricultural Agent, Hartford County.  
Margaret L. Robinson, B. S., County Home Demonstration Agent, Hartford County.  
Jennie E. Maxfield, Ph. B., Emergency Home Demonstration Agent, Hartford County.  
Jeannette E. Metcalfe, Emergency Home Demonstration Agent, Hartford County.

- \*H. A. Brundage, County Club Leader, Hartford County.  
 A. W. Manchester, B. S. County Agricultural Agent, Litchfield County.  
 Emily R. Bronson, County Home Demonstration Agent, Litchfield County.  
 Marie Lovsnes, B. S., Emergency Home Demonstration Agent, Litchfield County.
- \*H. A. Brundage, County Club Leader, Litchfield County.  
 John H. Fay, B. S., County Agricultural Agent, Middlesex County.  
 . . . . . Assistant County Agricultural Agent, Middlesex County.  
 Clara E. Ketcham, County Home Demonstration Agent, Middlesex County.  
 Gaylord A. Newton, B. S., County Club Leader, Middlesex County.  
 Lester F. Harvey, B. S., County Agricultural Agent New Haven County  
 A. B. Cook, B. S., County Agricultural Agent, New Haven County.  
 Agnes R. Ferguson, County Home Demonstration Agent, New Haven County.  
 Marie A. Nelson, Emergency Home Demonstration Agent, New Haven County.  
 . . . . . Emergency Home Demonstration Agent, New Haven County.  
 Paul P. Ives, County Club Leader, New Haven County.  
 F. C. Warner, B. S., County Agricultural Agent, New London County.  
 R. J. Whitham, Assistant County Agricultural Agent, New London County.  
 . . . . . County Home Demonstration Agent New London County.  
 Bertha A. Hallock, County Club Leader, New London County.  
 John E. Gifford, B. S., County Agricultural Agent, Tolland County.  
 A. C. Sheldon, B. S., Assistant County Agricultural Agent, Tolland County.

Margaret A. Costello, B. S., County Home Demonstration Agent, Tolland County.

B. W. Ellis, B. S., County Agricultural Agent, Windham County.

Percil L. Sanford, B. S., Assistant County Agricultural Agent, Windham County.

Charlotte Embleton, County Home Demonstration Agent, Windham County.

\*Part time.

---

## DIRECTIONS TO PROSPECTIVE STUDENTS.

You should read carefully this catalog, particularly those sections headed Requirements for Admission, and Students' Expenses.

1. Write for the formal application blank, answer the questions it contains, and mail it as early as possible to the secretary in order to facilitate dormitory and dining room arrangements.
2. Check trunks and send express packages to Willimantic. Address freight to Eagleville. Be sure to tag all packages and baggage with your name and the correct destination.
3. Write to the Secretary of the Connecticut Agricultural College stating the date and time of your arrival.
4. Upon arrival at the college, call at the office of the Secretary, for registration and directions.
5. Read carefully announcements on the bulletin board.

# CALENDAR FOR 1918-1919.

1918

## JULY

S.	M.	T.	W.	T.	F.	S.
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## AUGUST

..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## SEPTEMBER

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## OCTOBER

..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## NOVEMBER

..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## DECEMBER

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1919

## JANUARY

S.	M.	T.	W.	T.	F.	S.
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## FEBRUARY

..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

## MARCH

..	..	..	..	..	..	1
..	..	..	..	1	2	3
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## APRIL

..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

## MAY

..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## JUNE

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## ACADEMIC CALENDAR

### 1918-1919

---

1918

- Oct. 8—Tuesday—Registration for all students.  
Oct. 9—Wednesday—First semester begins at 8:00 A. M.  
Nov. 28—Thursday—Thanksgiving Day, a holiday.  
Dec. 25—Wednesday—Christmas Day, a holiday.

1919

- Jan. 1—Wednesday—New Year's Day, a holiday.  
Jan. 18—Saturday—First Semester closes at 12 M.  
Jan. 20—Monday—Second semester begins at 8:00 A. M.  
Feb. 22—Saturday—Washington's Birthday, a holiday.  
April 5—Saturday—Last day for submitting forensics for Ratcliffe-Hicks prize.  
April 26—Saturday—Ratcliffe-Hicks prize oration contest.  
May 2—Friday—Class work ceases at 12 M.  
May 3—Saturday—Commencement.

### AIMS

The aim of the college is to prepare young men and women for meeting the problems of leadership in rural affairs and in the life pursuits related to Agriculture and the Mechanic Arts. Since it is the individual as man or woman who is to be educated, training and instruction are not limited merely to productive activities and technology. Though, in the study of vocation, full recognition is given to the liberalizing value of understanding of the fundamental work of the world, cultural values are not sought in that study only, but also in the less immediate relations of language, literature, history and pure science. The curriculum is designed to provide, so far as circumstances permit, opportunity for the farmer, farm manager, research worker, extension worker, teacher, or demonstrator, to enter intelligently into his occupation and with appreciation into active life as a member of society.

Under the provisions of the Federal Act for Vocational Education the College is designated as the institution for training vocational teachers in Agriculture and Home Economics for the state of Connecticut. The courses offered for the pur-



pose are carefully chosen to meet the requirements of such teachers under the Connecticut plan.

In the school course in Agriculture, offered to those of less than full high school training, the aim of immediate proficiency in the meeting of farm problems is outstanding. The education of the farmer, rather than education for the farm, is still the determining factor in the selection of studies and methods, but the scope of all subjects is more definitely limited to knowledge and skill at once applicable to production. Graduates of the school course are prepared to enter intelligently upon farm work.

## EXTENSION TEACHING

The aims stated above indicate the policy of the college as an educative agency, but they refer particularly to the organization of the course of study and methods of instruction to the student at the college. A further function of first class and rapidly growing importance is that of taking to the farm and the home usable knowledge and practicable methods in Agriculture and Home Economics. For the carrying out of this purpose there has been established by joint action of the State of Connecticut and the government of the United States the corps of specialists of the Extension Service.

## LOCATION

The Connecticut Agricultural College is located in the town of Mansfield, Storrs post office, eight miles north of Willimantic. Freight and express are hauled from Eagleville on the Central Vermont Railroad, three miles and a half from the college. Passenger service is for the most part by automobile bus from Willimantic over a gravel and macadam road.

The site of the college is on high, well-drained land, commanding a wide prospect of unusual beauty. The campus is well laid out, large, and very attractive.

## BUILDINGS

**Main Building**—The Main Building, erected in 1890, is a two-story, wooden structure. It is the administrative center

of the college and houses the offices of the President, Secretary, and Treasurer, the Library and Reading Room, the Natural History Museum and Post Office. In the basement large rooms are equipped for wood work and machine work; on the upper floor are recitation rooms, and over the library a music studio and guest rooms.

**Experiment Station Office**—The offices of the director of the Experiment Station, the Station library and mailing room, are housed in a two-story frame building.

**Whitney Hall**—The offices of the Extension Service are in the original large frame building that housed the Storrs Agricultural School at its foundation. This bears the name of Whitney Hall.

**Grove Cottage**—The women's dormitory and seat of the Home Economics department is a very homelike and attractive frame building.

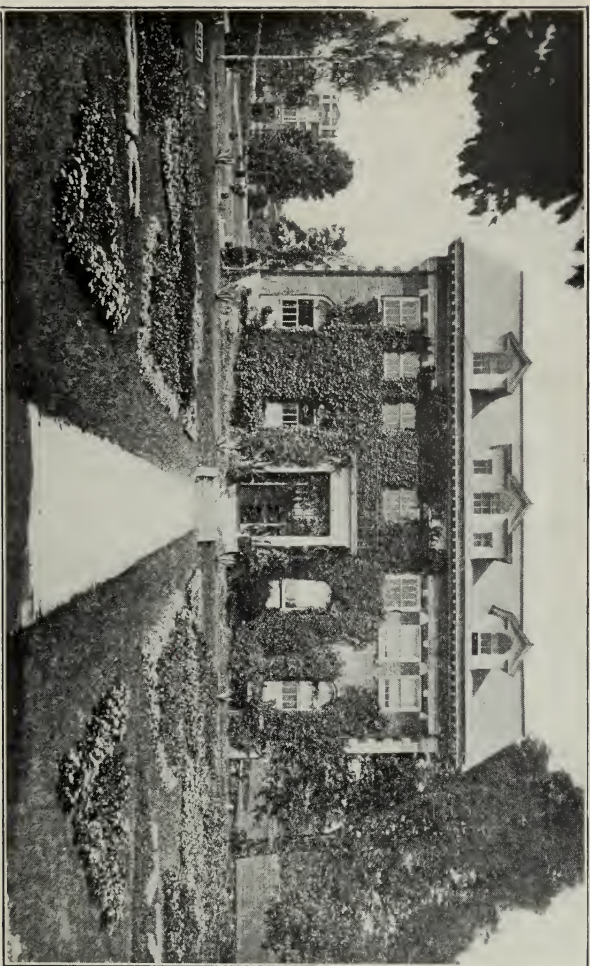
**Horticulture Building and Greenhouses**—The Horticulture Building houses department offices, lecture rooms and laboratories, the Botanical laboratory and Physics laboratory. The range of greenhouses based upon the home and office of the Florist provides a laboratory, propagation house, vegetable forcing house, rose and carnation house, vinery, and tropic house for economic plants of warm countries.

**Dairy Building**—A three-story building of stone and brick equipped for the offices, laboratories and class rooms of the departments of Dairy Husbandry, Agronomy, and Bacteriology. Boilers, steam and gasoline engines, a refrigeration plant and gas plant serve to the modernization of laboratory conveniences.

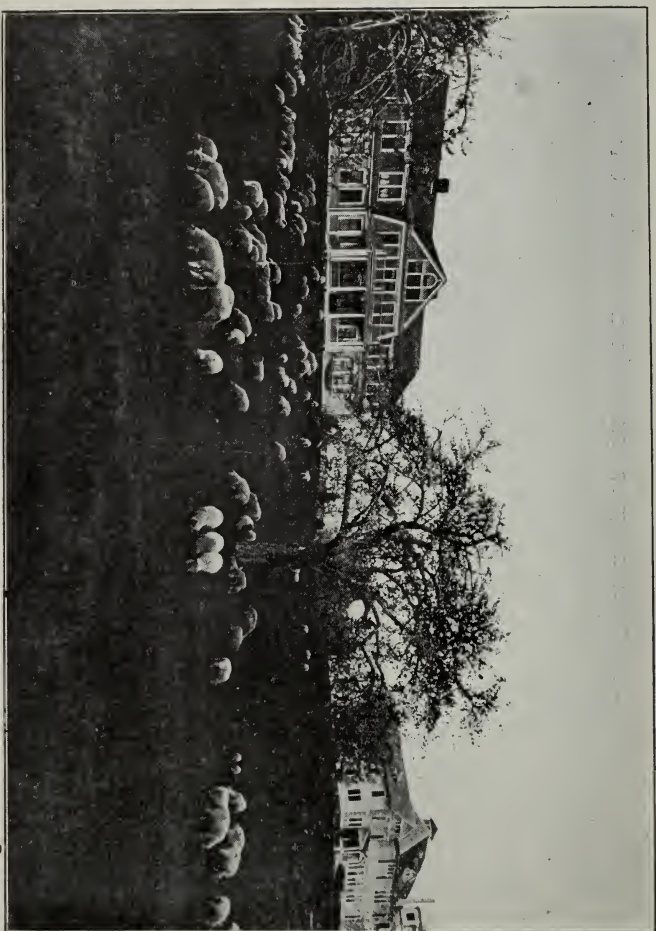
**Poultry Building**—The poultry department is housed in a new four-story brick building, 42 by 63 feet.

**Farm Buildings**—The farm barn, 41 by 70 feet, with new addition, has feed storage capacity and accommodations for fifty head of dairy cattle. The horse barn, 40 by 80 feet, with new addition, is devoted to the housing of horses, vehicles, and feed. The additions to both of these barns recently made have largely increased their capacity. The additions are of hollow tile and cement construction. They were made upon an appropriation of \$10,000 for each building. The farm has the use also of the barns upon the Jacobson place, now the property of the college.





HORTICULTURE BUILDING ARMORY IN BACKGROUND



WAR-TIME LAWN MOWERS AT WORK BEFORE GROVE COTTAGE

**Farm Machinery Building**—A two-story building with cement floors and elevator was erected in 1915 for instruction in the operation and repairing of farm machinery.

**Armory and Gymnasium**—This is a brick and stone structure with slate roof and cement floors. One end is given over to a stage, dressing rooms and band room. The other has a reception room, offices for the physical director and the commandant, and faculty club room. The drill room and gymnasium has a floor 72 feet by 140 feet and a running track thirteen laps to the mile. In the basement are bowling alleys, shooting gallery, locker room and shower baths. Excavation has been made for a future swimming pool.

**Dormitories, Storrs Hall**—This is a semi-fireproof building with granite trimmings, erected in 1905 at a cost of \$60,000. There are six single rooms and 30 suites of three rooms each, two bedrooms being connected with each of the thirty studies. It is steam-heated, equipped with shower and tub baths and dressing rooms with lockers, and is modern in all appointments. The dormitory is designed to accommodate 66 students.

**Koons Hall**—This building is practically a replica of Storrs Hall. Cement floors, however, have been used, and a few minor changes have been made in the interior arrangements and fittings. The appropriation for the building was \$75,000.

**The Dining Hall**—The dining hall is a brick building with sandstone trimmings, in the form of a Maltese cross. The main part, 36 by 80 feet, is two stories with basement, and the two wings one story each with basement. The building contains a dining room with capacity for 200 students, kitchen, storerooms, steward's quarters, and rooms for helpers.

**Dwelling Houses**—There are on the college grounds twenty-six dwelling houses, Whitney Hall with four apartments and the Valentine house with three apartments, occupied by families of instructors and employees.

**Sewage System**—The sewage from the dormitories and college buildings is purified on sand filter beds, eight in number, each twenty feet by sixty feet and four feet deep. The beds are used in rotation so that each bed works one day and rests seven. The effluent is non-putrescible.

**Water System**—Water from an artesian well 800 feet deep is pumped to a standpipe holding 300,000 gallons and is supplied to all buildings. Some of the buildings are protected in this way against fire. About 60,000 gallons per day are used.

**Central Heating Plant**—This plant has been built during 1916-1917, and will be in operation for the winter of 1918-1919. The dormitories, recitation halls, and Armory will be heated from one steam main; the dairy building and dining hall from another. The equipment is modern.

## EQUIPMENT

**College Land**—The college owns about 1074 acres. Portions of the land are allotted to the college farm, the horticultural department, and the experiment station. The use is such as to illustrate the processes and principles both of general and of specialized agriculture, and for experiment. The campus furnishes facilities for instruction in landscape gardening, floriculture, and road making; the woodland reserve for forestry.

**Agronomy**—Large laboratories for soils and field crops study, and the necessary storerooms are provided in the Dairy building. Experiment plots and the college farm serve as excellent material for field work.

**Agricultural Engineering**—The Farm Machinery Building contains a full and excellent equipment of standard tools, machines and engines.

**Horticulture**—For the study of Fruit Growing the horticultural department controls three orchards and a vineyard. The trial orchard has 400 trees in full bearing, including the standard as well as new and rare varieties. A commercial orchard of 15 acres of apple and peach trees is in bearing. For the testing of stocks and of commercial value a dwarf orchard of 500 trees on Paradise and Doucin stocks is available. The vineyard of 1½ acres contains all standard varieties and many less common; the vinery on the greenhouse range is devoted to foreign grapes.

In the vegetable gardens and small fruit plantations all varieties common to the latitude and many rare and peculiar sorts are available for study. The ornamental planting of the campus provides extensive opportunities for study of trees, shrubs, vines, herbaceous perennials, annuals, and bedding plants, in season.

Laboratory facilities adequate to the needs of classes are housed in the Horticulture Building and Greenhouse.

**Dairy Husbandry**—The dairy laboratory and college creamery are in the basement of the Dairy Building. Power and hand equipment for separation, testing, butter making, cheese making, and ice cream making is provided. A complete refrigeration plant, two steam engines and a 40 h. p. boiler serve for first hand study.



**Live Stock and Animal Husbandry**—Both the Dairy Husbandry and Animal Husbandry departments make extensive use of the excellent equipment in live stock. In cattle, specimens of the three types, dairy, dual purpose, and beef, are owned by the college. The dairy herd is made up of males and females of pure bred and advanced registry stock of the four leading breeds, Holstein, Jersey, Guernsey and Ayrshire; several of them with state records for production. Dual purpose cattle are Devons and milking Shorthorns. The herd of beef cattle is made up of pure bred Shorthorns and Herefords.

Among the college horses are a pure bred Percheron stallion and several pure bred mares of the same breed. The flock of sheep is made up of Shropshires for the most part, with a few specimens of Southdowns and Dorsets. The swine herd is registered Berkshire.

The departments own a good library of herd books, flock books, and stud-books, for use in pedigree work. Charts, lantern-slides, skeletons, models and figures are available for the study of anatomy and for illustration in lectures on veterinary medicine.

**Physics**—The physics department occupies two well-lighted rooms on the third floor of the horticultural building. The laboratory is fitted with large working tables and a full equipment of new physical apparatus necessary for a complete laboratory study of the elements of mechanics, heat, light, sound and electricity. The physics lecture room directly off the laboratory contains a large lecture table and many costly pieces of apparatus used for demonstration purposes.

**Botany**—The botanical department is provided with 30 compound microscopes and has dissecting microscopes, tables, and general laboratory equipment for sections of 30 students. An autoclave, an incubating and a dry sterilizing oven, and a Jung Thoma microtome are used in the advanced courses. The botanical museum is furnished with a set of Hough's wood sections, a series of tree trunks cut to show the three sections, a set of Riker mounts showing tree specimens in summer and winter conditions, cases with alcoholic specimens, an herbarium with a good working collection of the local flora of Connecticut, and a small departmental library.

**Agricultural Botanic Garden**—This comprises at present one acre of land and is designed to serve as a field museum of agriculture. The largest section is given over to a systematic arrangement according to families of the most important economic plants. Thus among the legumes there are shown growing in separate plots the various clovers, vetches, alfalfa, beans, and peas, as well as some of the more common wild leguminous plants. A section is devoted to plots illus-

trating laws of variation and inheritance, and a considerable portion is set aside as an experimental garden for the study of various problems in plant genetics.

The botanic garden is used for demonstration purposes and to supply material for class work.

**The Machine Shop**, located in the basement of the main building, is equipped with a twelve horse-power gasoline engine, one iron shaper, two drill presses, three metal-turning lathes, one speed lathe, seven wood-turning lathes, one wood planer, one emery grinder, one hand trimmer, one band saw, one combination saw bench, and ten benches equipped with hand tools for pattern making.

**The Wood-Working Shop** is equipped with benches and hand tools for the accommodation of twenty-five students.

**Forging**—Ten forges with anvils and necessary tools are in a leased shop near the campus.

**Mechanical Drawing**—A room in Whitney Hall is equipped with desks, drafting boards, and designs for instruction in mechanical drawing.

**Surveying**—The equipment consists of transits, levels, compasses, a plane-table, and a full assortment of smaller instruments and accessories for instruction in surveying.

**Chemistry**—The main laboratory, which is used by classes in elementary, qualitative and organic chemistry, contains desks, lockers and ample individual equipment for one hundred sixty-four students. Besides the individual equipment the laboratory is provided with a very full line of chemicals and with balances, draft hoods, A. C. and D. C. electricity, gas, and many other modern laboratory conveniences.

The quantitative laboratory, located just off the main laboratory, contains besides the usual desks and individual equipment every convenience for carrying on the work in quantitative and agricultural chemistry. On the same floor with the main and quantitative laboratory and within easy access of the student is the chemical library which contains many valuable chemical books and current journals and periodicals.

**Forestry**—The wood lots belonging to the college comprising about 200 acres, together with the plantation of locusts, red and white pine, give an excellent opportunity for field work in forestry. The department is equipped with the necessary instruments for forest survey and mensuration.

**Bacteriology**—The teaching and research laboratories for bacteriology are located on the second and third floors of the

dairy building. Both laboratories are equipped with hot and cold water, gas, steam, refrigeration, sterilizers, incubators, balances, microscopes, and other apparatus for instruction and investigation.

**Zoology**—Students have abundant opportunity to see and study the different types of animals, both the invertebrate and the vertebrate forms. The museum contains types of all the important classes of animals, and the laboratory is well provided with compound and dissecting microscopes, together with aquaria and breeding cages for the dissection and study of such animals as are generally used in courses of zoology. The specimens used for dissection are procured in the vicinity of the college and from Wood's Hole, Mass.

**Entomology**—The collection of insects includes those of greatest economic importance, together with large numbers of the common insects found in Connecticut. The college provides the material for the dissection of the types of insects used in the study of entomology and a case in which a collection made by the students during the spring of the sophomore year and the fall of the junior year may be kept throughout that period. The library is well supplied with books on entomology and with the bulletins from the different experiment stations and the Department of Agriculture at Washington. These are used for reference work in the courses of entomology.

**Home Economics**—The laboratories of the Home Economics department in Grove Cottage are equipped for efficient work in cookery and sewing. The cookery laboratory is fitted with modern desks, porcelain sinks, blue flame oil stoves, and electric stoves. The Sewing Laboratory, well lighted and airy, is supplied with tables for drafting and cutting, sewing machines, dress forms, and other necessary apparatus.

**Museum**—The museum contains type specimens of all the the important classes of animals from the protozoa to the vertebrata, the number varying according to the importance of the different classes of animals. The collection of gastropods is relatively large in number, and the most valuable portion of the museum is a collection of well-mounted birds. In addition to the collection of animals the museum contains numerous rocks, minerals, and fossil-bearing rocks, and Indian implements.

**Gilbert Farm**—From the estate of the late Edwin Gilbert of Georgetown, Connecticut, the college received the generous gift of a large farm, with all the live stock and equipment on it, and an endowment fund of \$60,000. The execution of the conditions of the bequest will by degrees, it is expected, introduce into the southwestern portion of the state the methods of tillage, animal husbandry, and fruit growing approved and practiced by the college.

**Dunham Farm**—Through the generosity of Mr. Austin C Dunham of Hartford, a native of the Town of Mansfield, the College has acquired a well-stocked and equipped farm of 130 acres in the Town of Newington.

**Summary**—Inventories of the college lands, buildings, and equipment at Storrs show values of \$1,262,772.18.

## STUDENTS' EXPENSES, SCHOLARSHIPS AND LOANS, EMPLOYMENT.

**Tuition**—Tuition is free to students whose parents or guardians are legal residents of Connecticut. For students whose parents or guardians are legally resident in other states a fee for tuition payable at registration is due equal to that chargeable to residents of Connecticut at the Land-grant college of the particular state in question. For students whose parents or guardians are resident in foreign countries a tuition fee of \$30.00 per semester is charged.

**Deposit for Military Equipment**—Every student not exempt from military training must deposit at registration the sum of twenty-five dollars as insurance to the proper care of military equipment furnished him by the United States. This deposit is returnable upon the withdrawal of the student from college or school, when the commanding officer or his representative has certified to the receipt of the equipment in good condition.

**Fees**—Students resident in the college dormitories must pay at registration, with the beginning of every semester, a fee of \$50 to cover room rent, heat, light and laboratory expenses.

Students not residents in the college dormitories must pay at registration with the beginning of every semester, a fee of \$25.



**Athletic Association**—By vote of the trustees the fee of \$10 per year for the support of the Athletic Association is assessed and collected by the Treasurer of the college for every student, unless, before the end of the first semester, the student shall file with the Treasurer a signed statement that he is "unable or unwilling to make such payment."

**Board**—Table board is furnished on the following plan: A minimum charge, based upon cost, is made for the midday meal, and for service, bread, butter, milk, vegetables, cake, sauce, etc., at breakfast and supper. At the morning and evening meals, meat, eggs, fish, fruit, and dessert are served a la carte. For such orders coupons are required. Books of coupons for a la carte ordering are sold at \$5.00 each. They are not transferable. The minimum charge is about \$5.00 per week. No reduction is allowed for less than one week's continuous absence, and then only when notice has been given in advance to the manager of the dining hall. Students are not allowed to board themselves in the dormitories.

**Laundry**—A laundryman calls for soiled clothing twice a week. Students are given special rates.

**Payment of Bills**—Semester fees and tuition fees (by non-resident students) must be paid in advance at the time of registration. No rebates upon these charges will be allowed after November 1, 1918. Cash payment in advance for table board must be made semi-monthly. Cash is required in payment for laundry, books and supplies. Registration will not be validated for any student who is in arrears with payments at the beginning of any semester, or will certificate, diploma, or degree be granted to any student until all accounts are paid.

**Lodgings**—The dormitories are equipped with a three-quarter bed or single bed, a mattress, a table, a bureau, and a chair for every student. Occupants must furnish their own pillows and bed clothing. They may bring such furnishings as rugs, curtains, and pictures. Entries and rooms are lighted by electricity. Occupants are held responsible for proper use and care of their rooms and furnishings.

**Keys**—Every student must deposit \$1.00 for the key to his room. Upon return of the key the deposit is remitted.

**Damage and Breakage**—Charges for damage to college property are assessed to students responsible for it.

**Books, Stationery. Supplies**—For the convenience of students and instructors the college maintains a book store in the Main Building. Prices are based upon cost of maintenance. The store is not run for profit.

### **SPECIMEN EXPENSES FOR A RESIDENT STUDENT FOR THE COLLEGE YEAR.**

Semester fees .....	\$100.00
Board, 30 weeks.....	150.00
Athletic Association .....	10.00
Books and Supplies .....	15.00
Laundry .....	15.00
	<hr/>
	\$290.00
Returnable deposit for Military Equipment .....	\$25.00

### **SCHOLARSHIPS AND LOANS**

**County scholarships for College Students**—Under legislative enactment the trustees may grant sixteen scholarships a year to worthy student residents of Connecticut. Not more than two such scholarships may be awarded to applicants from any one county. The value of the scholarships is \$100 each, amounting to a remission of semester fees for the year. Applicants for scholarships should write to the Secretary, Connecticut Agricultural College, Storrs, Conn., for information as to requirements.

**Grange Loans**—Students in the College or the School of Agriculture who are members of the order of Patrons of Husbandry may borrow sums not to exceed \$100 per year from the State Grange of Connecticut. Award of loans is at the discretion of the Executive Committee of the State Grange. About \$1000 is available. Applications should be made in writing to Professor C. A. Wheeler, Connecticut Agricultural College, Storrs Conn.

**Cadet Appointments and Awards**—The officers of the college military company are appointed and promoted according to their proficiency in military science and drill, their soldierly bearing, and their good conduct.

The highest officers, in recognition of their efficient work, receive at the end of a year of successful service the following prizes: Major, \$25; three captains, \$25 each; five first lieutenants, \$20 each, chief musician, \$20; three second lieutenants, \$15 each; three first sergeants, \$10 each. No officer reduced to the ranks for breach of discipline is awarded either the whole or any portion of one of these prizes.

## **EMPLOYMENT**

The college does not guarantee employment to any student. Students desiring employment should apply to the committee on student labor, which is usually able to find work for those of good standing, who have need to earn, in part, their way through college. The standard of wages is 20 cents an hour.

Students are expected to give their prime attention to college and school studies. No student will be permitted to give an undue proportion of his time to paid labor. Students who must earn a considerable part of their expenses should expect to forego the enjoyment of leisure that others may have.

## **REGULATIONS CONCERNING ADMISSION, REGISTRATION, STANDING, ATTENDANCE, ETC.**

### **REQUIREMENTS FOR ADMISSION**

#### **A. TO THE COLLEGE.**

Applicants for admission to college courses must be at least sixteen years of age. They must pledge themselves that, if admitted, they will comply in good faith with the rules and administrative regulations of the college. Of entrants from other colleges letters or certificates of honorable dismissal are required.

### **TO CANDIDACY FOR THE DEGREE OF BACHELOR OF SCIENCE.**

A student may be admitted to the Freshman class as candidate for the degree of Bachelor of Science.

1. Who presents a certificate of completion or a diploma of graduation from a secondary school in Connecticut having a program of not less than four years and approved by the

State Board of Education, or from a school of equivalent grade elsewhere located.

2. Who shall present evidence of having passed the examinations of the College Entrance Board, or other examination of like standard, in fourteen and one half units.

### **ADVANCED STANDING.**

Students may be admitted to candidacy for the degree of Bachelor of Science who have been in regular standing at other institutions of college grade. Credit for advanced standing will be determined by the Secretary upon receipt of an official statement of the nature and rating of work at such institutions.

### **SPECIAL STUDENTS.**

Students may, with the approval of the President, be admitted to college studies, but not to candidacy for the degree of Bachelor of Science

1. Who have met the requirements for admission to the Freshman class, as above.

2. Who are graduates of the School of Agriculture.

3. Who are eighteen years of age or over and have completed not less than twelve units or three years of secondary school work in satisfactory fashion.

4. Who are twenty-one years of age or older and in the opinion of the President are capable of undertaking college work with profit.

### **ADMISSION OF SPECIAL STUDENTS TO CANDIDACY FOR THE DEGREE OF BACHELOR OF SCIENCE.**

A special student in class 3 above may, with the permission of the President, be admitted to candidacy for the degree of Bachelor of Science

a. Who presents evidence before the opening of the third year of his residence of the passing of examinations of the College Entrance Board in the particular units in which he is deficient.

b. Or who has completed in satisfactory fashion college courses specified by the Secretary as a means to the remedy of such deficiencies. Not less than six semester hours shall be credited against each unit of deficiency, nor shall any semester hours so credited be counted toward the earning of the degree.

## REQUIREMENTS FOR ADMISSION. B...TO THE SCHOOL.

Applicants for admission to the School of Agriculture must be at least sixteen years of age. They must present credentials showing completion of the work of grade 8 in the elementary schools or an equivalent preparation.

No special students will be admitted to the School of Agriculture.

### REGISTRATION.

All students are required to register on the day assigned to registration in the Academic Calendar at the beginning of the year. Students entering for the second semester must register on the first day of that semester. Matriculated students will file their elections for the second semester with the Secretary during the last week in December. Fees are due at the Treasurer's Office on Oct. 8, 1918, and Jan. 20, 1919. Late registration entails a fee of \$2.00, which may be remitted upon certification by the Secretary to unavoidable absence.

## REQUIREMENTS FOR GRADUATION WITH THE DEGREE OF BACHELOR OF SCIENCE.

Students admitted to candidacy for the degree of Bachelor of Science must complete in a satisfactory manner the study of subjects required and elective to a total of not less than one hundred and fifty semester hours or units of credit. No student is exempt from any of the subjects required in the course which he has entered except as he may show to the satisfaction of the Secretary completion of equivalent work at another institution. Freshmen may elect to a total of units approved by the Secretary and in subjects approved by their advisors. Sophomore, junior and senior students may elect subject to a total approved by the Secretary under advice and signed approval of the head of the department in which the student is making specialization of his work. Change from one department to another after the sophomore year will not be permitted except by vote of the committee on Course of Study.

### REQUIREMENTS FOR SPECIAL STUDENTS

Every special student shall enroll for not less than fifteen units of credit per semester and shall complete at least fifteen such units in a satisfactory manner in order to continue as a



member of the college for any later semester. Special students should consult with heads of departments and other instructors, but must submit their elections to the Secretary for approval. No special student who is carrying less than the number of units required for regular students shall be eligible to play on any athletic team representing the college.

## REQUIREMENTS FOR THE DIPLOMA OF THE SCHOOL OF AGRICULTURE.

Students admitted into the School of Agriculture must complete in a satisfactory manner the required course of study.

### FARM PRACTICE.

No student in Agriculture shall receive the degree of Bachelor of Science from the college or a diploma from the school who has not an approved record of at least three months of actual farm practice achieved at another time than during the college years of his enrollment as a student.

### GRADES AND CONDITIONS.

The standing of every student at the completion of each of his studies is designated on a scale of six letters ranging from highest to lowest. A and B are honor marks, C. and D. are passing marks, Grade E denotes a *condition* in the subject; grade F a complete failure.

A student who receives grade F in any subject can receive no credit for any work done in the course. His only recourse is a complete and satisfactory repetition in another semester of the required work in the subject.

A student who receives a *condition* in any study is given two opportunities to remove his condition by special examinations in the semester following his condition. Special examinations for this purpose will be held on the second, fourth, and next to the last Saturdays of each semester. A permit card from the Secretary and a fee of one dollar are required for every special examination for removal of a condition. Seniors or second year School students who receive grade E in subjects in the final semester will be given opportunity to remove such conditions by special examination.

Failure to remove a condition in a prescribed study entails a repetition of that study.

A student who fails to complete the work in any study, but whose standing in that study is otherwise satisfactory is reported without grade as *Incomplete*. If a student so reported makes up the work in a manner satisfactory to the instructor during the first four weeks of the new semester he is given a grade of passing value or better, if not he is given the grade F.

An instructor, with the approval of the Secretary, may at any time exclude from his course a student who has neglected the work of the course. Such a student may in the discretion of the Secretary be placed on probation.

### INFORMATION AS TO STANDING.

At the close of every semester the complete record of each student's work (including record of failure in any study) is sent to his parent or guardian. Failure to receive such record, however, does not relieve a student from compliance with any of the rules governing removal of conditions.

Reports of standing for every student up to the first of each month of the academic year is made to the Secretary by instructors. The records made up from these reports may be inspected by students on stated days and hours of every month. Warnings and notifications are not sent to students or posted upon the bulletin boards. Responsibility for knowledge of his status rests with the student.

### HONORS AND EXEMPTIONS.

A student who has completed the work of his *major group* with no grades below B, and whose other work falls in no study below C may be recommended by the department or departments of his *major group* for a degree with distinction. The fact that he has completed with distinction advanced work in a special field will then be stated upon his diploma, upon the Commencement program and in the annual College Catalog.

A student whose standing for the year falls in no study below the grade of C and whose average standing for the year is grade B or better is rated an Honor Student and his name published in the annual catalog.

Examinations are given at the end of each semester in all courses. A student whose standing in any study at the time of examination is grade B or better may, at the discretion of the instructor, be exempted from examination. In case, however, the student chooses to take the examination he may do so, and his grade for the examination will be used in determining his grade for the semester.

### ABSENCE FROM EXAMINATIONS.

Attendance at examinations is imperative for all students not specifically exempted. A student who is absent because of illness or other reason that in the judgment of the Secretary makes such absence unavoidable will be given opportunity for special examination without fee during the first four weeks of the succeeding semester.

### ATTENDANCE.

The following are regulations concerning attendance at college exercises:

1. Students are expected to attend all college exercises.
2. Excuses will be granted for absences due only to (a) serious illness\* or (b) participation in a college activity which is under direction of a member of the faculty.
3. To cover absences due to slight illness or other causes, an allowance of unexcused absences is granted in each semester equal in number to one half the total semester hours for which the student is registered, but the number of absences in any one course shall not exceed the number of semester hours in that course. A student who in the previous semester has a recorded standing average of grade B or better is entitled to twice the allowance above.
4. Any unexcused absences that, in the judgment of the Secretary, tend to prolong a vacation# period shall count double.
5. A student who exceeds his allowance of unexcused absences shall be summoned before the Administration Committee which has full power to deal with his case as it sees fit.

\*The presentation of a physician's certificate is necessary to the granting of the excuse.

#A vacation is any holiday or recess scheduled on the Academic Calendar or posted on the bulletin board.



## REGULATIONS AND MILITARY TRAINING.

Every student entered in college or school is subject to the administrative regulations of the college, and all male students to the military rules of the commanding officer in charge of military instruction.

### MILITARY TRAINING—CONNECTICUT AGRICULTURAL COLLEGE R. O. T. C.

One of the first of colleges to be designated by the War Department for the establishment of a unit of the Reserve Officers' Training Corps is the Connecticut Agricultural College. Under United States Army officers students are trained by the systematic and standard prescribed methods of the department for the intelligent performance of the duties of commissioned officers in the military forces of the United States. The system of instruction is so arranged as least to interfere with the specific education of the student in other fields. Education for performance of the duties of citizenship takes its place beside education for the enjoyment of the rights of the citizen.

A young man now entering the Connecticut Agricultural College, if a citizen of the United States and physically fit, may become a member of the Reserve Officer's Training Corps. Without cost he is furnished with rifle, uniform and necessary equipment. For two years he devotes three hours a week to military training under the prescribed course. At the end of the two years, if he so elects, and if he is recommended by the President of the College and the Commandant, he may sign an agreement to devote five hours a week to an advanced course in military training for the remaining two years of the college course and to undertake such camp training as may be prescribed by the Secretary of War. To those who elect the advanced course, monthly payment will be made of about nine dollars. Under the present plan camp training will call for four weeks in the summer of each of the two years of the advanced course. All expenses of the student for summer camp training will be met by the United States Government.

A graduate of the college who has completed the advanced course is eligible for appointment by the President of the United States as Second Lieutenant in the regular army for a period of six months with pay at \$100 per month and to a commission in the Officers' Reserve Corps.

## PRIZES AND HONORS.

**Ratcliffe Hicks Prizes for Orations**—Five seniors in regular standing will be appointed upon recommendation of the instructor in English to compete for two prizes of \$20 and \$15 respectively. Their orations must occupy not less than ten minutes in delivery and not more than fifteen minutes, must be the student's unassisted work, and must be approved by the instructor who made the appointment. Orations must be type-written and handed to the secretary of the faculty by noon on the first Saturday in April. The contest will be held on the fourth Saturday, and the prizes will be awarded by a committee of judges, who will pass upon both composition and delivery, equal weight being given to each.

**Ratcliffe Hicks Prizes for Declamation**—A contest open to all regular juniors and sophomores, with two prizes of \$15 and \$10 respectively. Three speakers from each class will be appointed on recommendation of the instructor in public speaking and will take part in a contest held on the Friday evening before the final examination of the year. The contestants may be coached by the instructor in public speaking. A student winning first prize will not be eligible to compete again.

## ROOM ASSIGNMENTS.

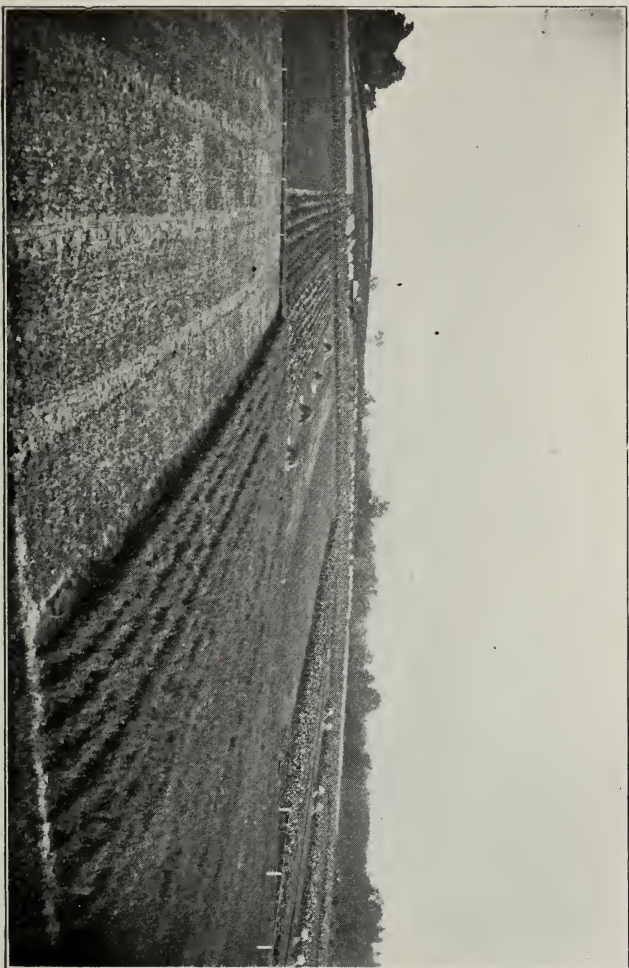
On advice of the Student Council the following regulations governing assignment of rooms to old students are in force:

1. Applications are to be in the Secretary's hands on April 15th. Applicants should indicate a first, second and third choice.

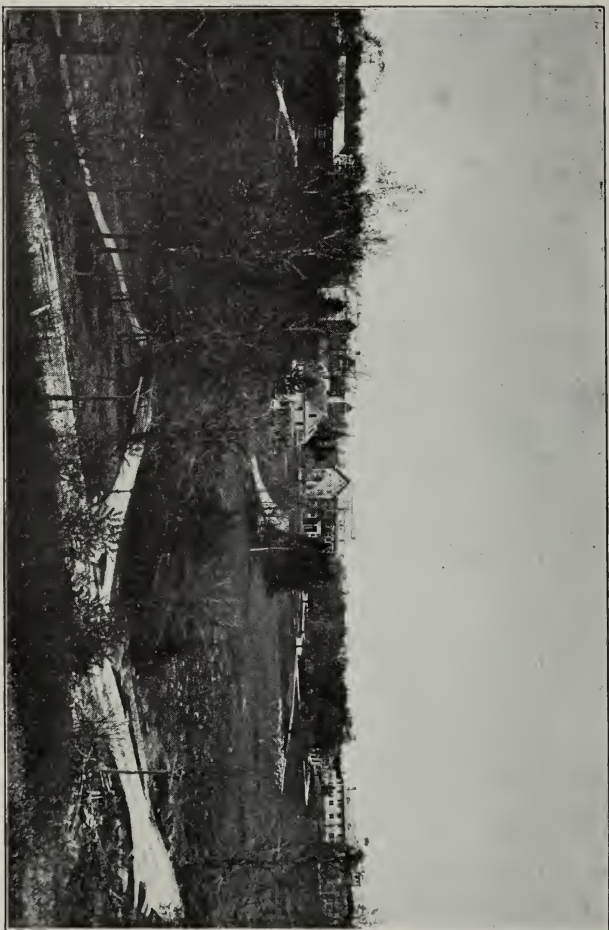
2. In deciding to which of several groups a room shall be assigned, a senior shall count 4 points, a junior 3, a sophomore 2, and a freshman 1. The room shall be given to the group with the greatest number of points. A tie will be decided in favor of the upperclassmen, or by lot if no such advantage exists.

3. After April 15th, applications will be filled in the order of their receipt, without regard to classes.

4. Room assignments may not be changed except by permission of the Secretary. A student who desires to share in the occupancy of a room already held by others will be required to satisfy the Secretary that he is welcome to those already in possession.



EXPERIMENTAL PLOTS



ANOTHER VIEW OF THE CAMPUS

# The Courses of Study—College Courses

## AGRICULTURE—SCIENCE

### I.

#### FRESHMAN YEAR

First Semester		Second Semester	
Title and Number	Credit Units	Title and Number	Credit Units
English 1 (81)	3	English 1 (81)	3
Agronomy 1a (28)	3	Botany 1b (53)	4
Zoology 1a (58)	4	Animal Husbandry 1b (22)	3
Agricultural Engineering 1a (34)	1½	Agricultural Engineering 1b (35)	1½
Physical Education (159)	1	Physical Education (159)	1
Military Art 1a and Drill (151)	1½	Military Art 1b and Drill (152)	1½
	<hr/> 14		<hr/> 14
Minimum Elective	6	Minimum Elective	6

#### SOPHOMORE YEAR

English 2 (82)	2	English 2 (82)	2
Chemistry 2 (77)	4	Chemistry 2 (77)	4
Agronomy 2a (29)	4	Farm Management 2b (32)	3
Agricultural Engineering 2a (36)	3	Military Art 2b and Drill (154)	1½
Military Art 2a and Drill (153)	1½		<hr/> 10½
	<hr/> 14½	Minimum Elective	9½
Minimum Elective	5½		

#### JUNIOR YEAR

History 3 (96)	3	History 3 (96)	3
Economics 3a (100)	3	Economics 3b (101)	3
Drill	1½	Drill	1½
	<hr/> 7½		<hr/> 7½
Minimum Elective	10	Minimum Elective	10

#### SENIOR YEAR

Drill	1½	Drill	1½
Minimum Elective	16	Minimum Elective	16



## RULES GOVERNING ELECTIVE STUDIES.

1. Studies marked A or having the number 1 are open to Freshmen

Studies marked A or B or having the numbers 1, or 2 are open to Sophomores.

Studies marked A, B, or C or having the numbers 1, 2, or 3 and studies offered in alternate years are open to Juniors.

All studies are open to Seniors.

2. Prerequisite studies must be completed before election of any study.

3. In the choice of elective studies students will observe the following rules. Exceptions, however, will be made upon petition to the Course of Study Committee in the case of students of maturity and earnestness of purpose who can show cause for the changes they desire.

### MAJOR GROUP.

(a) During his Sophomore year every student shall plan his elections for the remainder of his course. He shall choose a major subject, studies in which may be carried on under a single department, provided the department offers the necessary number of units of instruction. Or he may plan to do his major work in two related departments, subject to the approval of the Course of Study Committee. The group of studies so chosen for major work under a single or two related departments is designated as his *major group*. The particular studies of this *major group* shall be chosen with the advice and approval of his official *advisor*, a designated member of the department or one of the departments concerned. The major group shall be made up of not less than *thirty* semester hours or *credit units* of consecutive work in the department or departments to which the group belongs. No studies required of all students shall be counted toward this *major group* total, but elective studies completed before choice of the major group may be so counted.

### MINOR ELECTIVES.

(b) In addition to his *major group* every student shall elect with the advice and approval of his advisor not less than *twenty credit units* in studies that lie outside his major group, but are related and complementary to it. He shall also elect at least *fifteen credit units* in studies which are, in the judgment of his advisor, unrelated to his major study. Remaining units necessary to the completion of requirements for the degree are free electives.

The plan for electives must be filled in on a blank to be obtained at the Secretary's Office, indorsed by the student's advisor, and filed with the Secretary. The plan must be filed not later than April 15 of the Sophomore year. No student will be registered as a Junior except his approved plan be on file.

Note: The rules above do not apply to students registered for the Teacher Training Courses in Agriculture or Home Economics or to those registered for the Mechanic Arts Course.

# MECHANIC ARTS COURSE

## II.

Prof. Fitts, Prof. Wheeler.

### FRESHMAN YEAR.

First Semester			Second Semester		
Title and Number	Credit	Units	Title and Number	Credit	Units
English 1 (81)		3	English 1 (81)		3
French 1 or German 1			French 1 or German 1		
(90) (93)		3	(90) (93)		3
Mathematics 1 (115)		3	Mathematics 1 (115)		3
Chemistry 2 (77)		4	Chemistry 2 (77)		4
Mechanic Arts 1 (121)		1½	Mechanic Arts 1 (121)		1½
Agricultural Engineering			Mechanic Arts 1b (121)		1½
1a (34)		1½	Physical Education (159)		1
Physical Education (159)		1	Military Art 1b and Drill		
Military Art 1a and Drill			(152)		1½
(151)		1½			
		<hr/>			<hr/>
		18½			18½

### SOPHOMORE YEAR.

English 2 (82)	2	English 2 (82)	2
French 2 or German 2		French 2 or German 2	
(91) (94)	3	(91) (94)	3
Mathematics 2a (116)	4	Mathematics 2b (117)	2
Chemistry B (78)	4	Chemistry B (78)	4
Mechanic Arts 2a (123)	2	Physics 2b (112)	3
Physics 2a (111)	3	Mechanic Arts 2b (124)	2
(153)	1½	Mechanic Arts 2d (125)	1½
Military Art 2a and Drill		Military Art 2b and Drill	
		(154)	1½
	<hr/>		<hr/>
	19½		19

### JUNIOR YEAR.

Economics 3a (100)	3	Economics 3b (101)	3
Mathematics 3a (118)	4	Mathematics 3b (120)	4
Mathematics 3c (119)	2½	Mechanic Arts 3 (126)	2
Mechanic Arts 3 (126)	1½	Mechanic Arts 3b (129)	3
Mechanic Arts 3a (127)	1½	Mechanic Arts 3d (130)	1½
Mechanic Arts 3c (128)	3	Mathematics 3f (120x)	2
Drill	1½	Mechanic Arts 3f (131)	3
	<hr/>	Drill	1½
	17		<hr/>
			20

### SENIOR YEAR.

Mechanic Arts 4 (132)	4	Mechanic Arts 4 (132)	4
Mechanic Arts 4a (133)	3	Mechanic Arts 4b (134)	2
Mechanic Arts 4c (135)	2	Mechanic Arts 4d (136)	3
Mechanic Arts 4e (137)	2	Mechanic Arts 4f (138)	2
Drill	1½	Drill	1½
	<hr/>		<hr/>
	12½		12½

and  
Minimum Elective during course

12½

## TEACHER TRAINING COURSES

Prof. Eaton, Prof. Sprague.

Course for the Training of Teachers of Agriculture in  
Secondary Schools.

### III.

Approved and Adopted by the State Board of Education  
under

The Federal Act for Vocational Education.

#### A

Required Subjects	Credit Units		
English 1 and 2	(81) (82) 10	Chemistry 2	(77) 8
Agronomy 1a, 2a	(28) 6	Economics 3a, 3b	(100) 6
(29)	6	(101)	6
Agricultural Engineering		History 3	(96) 6
1a, 1b, 2a	(34) (35) (36) 6	Physical Education	1
Farm Management 2b	(32) 3	(159)	2
Animal Husbandry 1b	(22) 3	Military Art 1a, 1b, 2a,	
Botany 1b	(53) 4	2b and Drill 2 yrs.	
Zoology 1a	(68) 4	(151) (152) (153) (154)	12
			<hr/> 70

Prescribed number of elective credits additional

#### Subject

#### B

Rural Sociology	4	Marketing	3
Dairy Husbandry	3	Bacteriology	4
Poultry Husbandry	3	Forestry	3½
Horticulture	3	Education	12
Genetics	3	Apprentice Teaching	15
Agricultural Economics	3		<hr/> 56
Agricultural Engineering 2½			

and one or another of the following elective groups

#### C

Vegetable Gardening	8
Economic Entomology	4
Plant Pathology	4
	<hr/> 16

#### D

Pomology	8
Economic Entomology	4
Plant Pathology	4
	<hr/> 16

#### E

Dairy Husbandry	8
Animal Husbandry	6
Veterinary Science	2
	<hr/> 16

#### F

Poultry Husbandry	8
Animal Husbandry	6
Veterinary Science	2
	<hr/> 16

Before appointment to a teaching position under the State Board of Education the candidate must give evidence of at least two years of actual farm experience.

The professor of Agricultural Education will place senior students during one semester as apprentice teachers in approved high school departments of agriculture. A full semester's college credit is granted for such teaching.

The plan of elective groupings must be made under approval of the professor of Agricultural Education.



# Course for the Training of Teachers of Home Economics.

## IV.

### FRESHMAN YEAR.

First Semester			Second Semester		
Title and Number		Credit Units	Title and Number		Credit Units
Home Economics 1a (139)	4		Home Economics 1b (140)	4	
Zoology 1a (68)	4		Botany 1b (53)	4	
Chemistry 2 (77)	4		Chemistry 2 (77)	4	
English 1 (81)	3		English 1 (81)	3	
Physical Education (160)	A	1	Physical Education (160)	A	1
Poultry Husbandry (15x)	1c	3	Horticulture 1d (41x)		3
		<hr/>			<hr/>
		19			19

### SOPHOMORE YEAR.

Home Economics 2a (141)	4		Home Economics 2b (143)	4	
Home Economics (142)	2c	2	Home Economics (144)		2
Physics B (113)	3		Physics B (113)		3
Chemistry 3 (79)	4		Chemistry 3 (79)		4
English 2 (82)	2		Bacteriology 2d (64)		4
Physical Education (161)	B	1	English 2 (82)		2
Dairy Husbandry 2c (4)	3		Physical Education (161)	B	1
		<hr/>			<hr/>
		19			20

### JUNIOR YEAR.

Home Economics 3a (145)	3		Home Economics 3b (147)		3
Home Economics 3 (146)	3		Home Economics 3 (146)		3
Chemistry 3a (78x)	3		Chemistry 3b (78y)		3
Physiology 3a (73)	4		Public Speaking 3b (84)		2
Education 3a (106)	3		Education 3b (108)		3
Education 3c (107)	3		Education 3f (110)		3
		<hr/>			<hr/>
		19			17

### SENIOR YEAR.

Home Economics 4a (148)	4		Sociology 4a (98)	4	
Home Economics 4c (149)	3		Completed Practice Credits		4
Home Economics 4e (150)	3				<hr/>
					18

or

Apprentice teaching in approved high school under supervision of department

15

## **SENIOR YEAR—Second Semester.**

The same as to subjects and credits. That half of the class which has been out for apprentice teaching will return for course work, the half which has completed course work in the first semester will go out for apprentice teaching.

Electives to a total of not less than five semester hours or more than thirty semester hours may be taken after the Freshman year under approval of the Professor of Home Economics and the Secretary.

### **Note on Apprentice Teaching.**

The College will undertake to provide for the placing of apprentice teachers in approved high schools and will designate a member or members of the department staff to a close supervisory duty in respect to students in service as apprentice teachers of Home Economics.

### **Note on Practice in the Household.**

The College will set aside to the use of students in small groups throughout the seven semesters of residence a household apartment adequately equipped, which shall be in constant use as an economic enterprise for practice, in all processes necessary to the care of kitchen, dining room, bath, bedroom; in the care and use of furniture, clothing, linen, blankets, rugs, etc.; in the use of tools in simple repair and betterment; in the planning, preparation and serving of meals; in the handling and storage of food; in the making of budgets, purchasing of supplies; in responsible supervision and management of a household group. The plan of group assignment to this apartment shall provide for a rotation of every student through tasks of successive complexity and responsibility. Every group shall include members of at least three classes.

# SYNOPSIS OF COLLEGE STUDIES

## Dairy Husbandry Department.

(1)

### Dairy Husbandry 1a

Prof. White, Mr. Alger, Mr. Kuelling.

**Milk Testing and Separation**—This course is a study of the composition and properties of milk, milk secretion, and factors causing a variation in the composition of milk; the Babcock test and its application in record keeping, in the sale of milk and cream, in testing skim milk to test the efficiency of the separator in testing milk and cream for the purpose of standardization, in testing cream and buttermilk in the buttermaking process, and in testing the lawfulness and food value of dairy products such as ice cream, condensed milk, butter and cheese; the use of the composite sample; the lactometer, and its use in testing milk for specific gravity and adulteration, testing the acidity of milk and cream; and the various methods of cream separation, including a study of the construction and operation of centrifugal separators.

Two hours lecture.

Two hours laboratory.

Credit units 3

Mr. Alger and Mr. Kuelling.

(2)

### Dairy Husbandry 1b

**Milk Production**—This course takes up the study of dairying from the standpoint of production of milk. The present status and extent of the industry are first considered. The balancing of dairy rations, systems of herd feeding, silage and silos, soiling crops and pastures, raising calves and heifers, care, feed and selection of the sire, the principles of dairy cattle breeding, dairy herd development and management, some common diseases of the dairy herd, and methods and forms for herd records including private, advanced registry and cow testing association work, are all taken up. Dairy barn construction, arrangement and equipment, milk production costs, fitting show stock, registering pure breds, tracing pedigrees, and dairy cattle valuation are a part of the subject matter and practicums.

Two hours lecture.

Two hours laboratory.

Credit units 3

Professor White and Mr. Kuelling.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(3)

Dairy Husbandry 2a

**Cattle Judging**—This course is a study of the history of the development of the dairy breeds, showing the influence of the show ring and other factors. The prize winners of leading cattle shows will be studied. A comprehensive study of the use and value of the scale of points will be made and practice in the comparative judging of animals will be provided.

One hour lecture.

Four hours laboratory.

Credit units 3.

Mr. Kuelling.

(4)

(Dairy Husbandry 2c) IV

Given in 1919-1920 and alternate years.

**Domestic Dairying**—The course is essentially a study of milk and its products, their manufacture and uses. The lecture work will take up the composition, nutritive and economic value of milk; the Babcock test and its applications; chemical and physical differences in milk and their relation to the public health; the clarification and pasteurization of milk; the use of milk in infant feeding; care of milk in the home; manufacture and uses of condensed milk, milk powders, buttermilk and fermented milks; separating cream from milk, and the home manufacture of soft cheeses, butter and ice cream. In the laboratory, the Babcock test and tests for purity will be applied to milk and its products; the clarification and pasteurization processes will be carried out and various dairy products will be manufactured.

Two hours lecture.

Two hours laboratory.

Credits units 3.

(5)

(Dairy Husbandry 2b)

Given in 1919-1920 and alternate years.

**Ice Cream Making**—This course will be a study of the ice cream business, its extent and importance; mechanical refrigeration and its relation to the ice cream business; the shipping properties of cream; factors affecting swell; making plain and fancy ice creams, sherbets,

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

ices and puddings. A trip will be made to visit two or three commercial ice cream plants. Prerequisite, Dairy Husbandry 1a. (1)

Two hours lecture.

Two hours laboratory.

Credits units 3.

Mr. Alger.

(6) (Dairy Husbandry 3a)

Given in 1919-1920 and alternate years.

**Animal Nutrition**—The laws of nutrition and the theory of metabolic processes are studied. The composition, digestibility, characteristics, and adaptability of farm and market feeds for different classes of animals, and the method of selecting the most economical feeds are considered. A study of feeding standards and their application in calculating balanced rations is thoroughly considered. Prerequisite, Chemistry 2. (77)

Three hours lecture

Credit units 3.

Professor White.

(7) (Dairy Husbandry 3b)

Given in 1918-1919 and alternate years.

**Butter and Cheese Making**—A study of cream for butter making, its quality, pasteurization and methods of ripening, choosing the churn, proper method of churning, washing, salting, and working butter; the market package, marketing butter; the cheese industry, its location and importance. The methods of making some of the soft cheeses such as cottage, neufchatel and cream cheese and the principles and practice of making cheddar cheese, are included. In this course particular emphasis will be laid on the making of butter and cheese under farm conditions, but some practice will be given with the power churns, and there will be general problems in creamery management. Prerequisite Dairy Husbandry 1a. (1)

Two hours lecture.

Two hours laboratory.

Credit units 3.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(8)

(Dairy Husbandry 3c)

Given in 1919-1920 and alternate years.

**Advanced Cattle Judging**—This is an advanced course in cattle judging. In addition to the animals in the College herd, at least one trip will be planned for visiting herds. An opportunity will be provided for experience in fitting, training and showing animals. Prerequisite Dairy Husbandry 2a. (3)

Four hours laboratory.

Credit units 2.

Professor White.

(9)

Dairy Husbandry 3d

**Seminar**—This course will be a study of the latest results obtained in dairy investigations. Each student must review carefully the literature on special topics and present his findings before the class; latest bulletins and scientific findings will be reviewed and discussed. Juniors and Seniors meet together. Prerequisite, student majoring in Dairy Husbandry having Junior standing.

Hour by arrangement.

Credit unit 1.

Professor White and staff.

(10)

(Dairy Husbandry 4)

Given in 1918-1919 and alternate years.

**City Milk Supply**—The topics cover the general scope of the market milk industry; value of milk and its products as food; sources of bacteria in milk and their significance, factors affecting the quality of milk before and at the time of milking, and after it is drawn, processing, grading and distributing milk, score cards for milk and for dairies; care of milk in the home; production and handling of special grades of milk; the manufacture of by-products in the milk plant, and the manufacture and use of condensed milk and milk powder. Prerequisite, Dairy Husbandry 1a and Bacteriology 2a. (1) (62)

Two hours lecture.

Two hours laboratory.

Credit units 6.

Mr. Alger.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

(Example: Agronomy 1a, I, III., The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(11) Dairy Husbandry 4a)

Given in 1918-1919 and alternate years.

**Herd Improvement**—This course will include the theory and practice of handling heifers for their best development and usefulness; the value and method of proper care at time of parturition; a study of infectious abortion and tuberculosis and methods of control; and the application of theories of inheritance to cattle breeding and methods employed to give the greatest success. Advertising live stock will be considered. A thesis is required. Prerequisite, Genetics and Dairy Husbandry 1b. (56) (2)

Two hours lecture.

Three hours laboratory.

Credit units 3½.

Professor White.

(12) Dairy Husbandry 4c

**Seminar**—This course is a continuation of Dairy Husbandry 3d.

(9)

One hour lecture.

Credit units 1.

Professor White and staff.

(13) Dairy Husbandry 4d

**Seminar**—This course is a continuation of Dairy Husbandry 3d and 4c. (9) (12)

One hour lecture.

Credit unit 1.

Professor White and staff.

**Poultry Husbandry Department.**

Prof. Kirkpatrick, Mr. Warner.

(14) (Poultry Husbandry 1a)

Offered in 1918-1919 and alternate years.

**Poultry Culture**—This course includes the following topics: The poultry industry; the poultry farm, buildings and equipment; breeds of domestic fowls, including water fowls and pigeons; principles of

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

**Example:** Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

breeding; selection of stock; preparation for market, including killing and dressing; poultry parasites and diseases.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. Warner.

(15) (Poultry Husbandry 1b)

Offered in 1919-1920 and alternate years. ..

**Poultry Culture**—A repetition of Poultry 1a offered in the first semester of the freshman year.

(15x) Poultry Husbandry 1c IV

**Housekeeper's Course**—In this course, the time will be devoted chiefly to a study of poultry and its products rather than the production of poultry. Some of the topics included are usefulness of the different breeds, selection of stock, preparation for market, dressing and trussing, handling and candling eggs, methods of preservation, market classification, etc.

Two hours lecture.

Two hours laboratory.

Credit units 3

Mr. Warner.

(16) Poultry Husbandry 2 a

**Poultry Production**—This course is a continuation and elaboration of courses 1a and 1b, one of which is prerequisite. It is designed for the purpose of bringing the student into closer touch with those essential details that make for success in the business of keeping hens. A part of the semester's work will be devoted to a study of show types of the various breeds and varieties as classified and arranged in the American Standard of Perfection.

Two hours lecture.

Three hours laboratory.

Credit units 3½.

Mr. Warner.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(17)

### Poultry Husbandry 2b

**Pathology**—This course will be devoted almost exclusively to discussions of the more important poultry diseases. The laboratory period will consist largely of diagnosing, prescribing, and treating individual and flock cases.

Two hours lecture.

Two hours laboratory

Credit units 3.

Professor Kirkpatrick.

Offered in 1919-1920 and alternate years.

(18)

### (Poultry Husbandry 3a)

**Commercial Poultry Keeping**—This course will deal principally with the laying out of large plants; the handling and management of commercial flocks; styles of houses, kinds of brooders, and other poultry appliances suitable for such enterprises; advertising; capital required, probable losses, causes of failure, etc.

Two hours lecture.

Three hours laboratory.

Credit units 3½.

Mr. \_\_\_\_\_

(19)

### (Poultry Husbandry 3b)

Offered in 1918-1919 and alternate years.

**Poultry Husbandry**—Special emphasis will be laid on the designing and construction of poultry houses. Practice work in incubation and brooding will be required. Students who contemplate electing this course should note that some of the practice work, particularly that in connection with incubation and brooding, cannot be scheduled in regular laboratory periods. Special hours must be arranged, since the nature of work will require the student's daily attention.

Two hours lecture.

Three hours laboratory.

Credit units 3½.

Mr. Warner.

- 
- I. Required in Agriculture-Science Course.
  - II. Required in Mechanic Arts Course. ,
  - III. Required in Teacher Training Course in Agriculture.
  - IV. Required in Teacher Training Course in Home Economics.
- All studies are elective to students of whom they are not required.
- |                           |                            |
|---------------------------|----------------------------|
| 1 or A Freshman year      | 2 or B Sophomore year      |
| 3 or C Junior year        | 4 or D Senior year         |
| a, c, or e First semester | b, d, or f Second semester |
- Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(20)

(Poultry Husbandry 4b)

Offered in 1918-1919 and alternate years.

**Seminar and Judging**—The lecture period will be devoted to a more or less informal discussion of recent poultry investigations. Every student will be required to prepare and present a paper on some special topic, to review bulletins and discuss general problems which from time to time may confront the department.

The laboratory period will be used largely for advanced work in the preparation and judging of show room types.

One hour lecture.

Two hours laboratory.

Credit units 2.

Staff.

(21)

(Poultry Husbandry 4b)

Offered in 1919-1920 and alternate years.

**Thesis**—This course involves the writing of a thesis prepared from data collected by the student or from other available but unreported records.

Two hours lecture

Three hours laboratory.

Credit units 3½.

Professor Kirkpatrick.

**Animal Husbandry Department.**

Prof. Garrigus, Mr. Skinner, Dr. Dow.

(22)

**Animal Husbandry 1b..I, III.**

**Study of Types and Breeds**—A systematic study will be made of the origin, history, development, characteristics and value of the different breeds of horses, cattle, sheep and swine. The laboratory work will consist of a study of the use of the score card and comparative judging. Text books—"Types and Breeds of Farm Animals" by Plumb, "Live Stock Judging and Selection" by Curtis.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. Skinner.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III.. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(23) **Animal Husbandry 3**

**Advanced Judging**—Advanced work in judging horses, cattle, sheep and swine, intended as a parallel course with the two below outlined. Plumb's "Judging Farm Animals" will be used as a text book.

Two hours laboratory.

Credit units 2.

Professor Garrigus.

(24) **Animal Husbandry 3a**

**Horses and Beef Cattle**—This will be a general study of production, management, showing and marketing of horses and beef cattle. Text books, Gay's "Productive Horse Husbandry" and Mumford's "Beef Farming."

Two hours lecture.

Credit units 2.

Professor Garrigus.

(25) **Animal Husbandry 3b**

**Sheep and Swine**—A study of the breeding, feeding and management of sheep, including the handling of wool, production of lambs for market, fitting and showing stock. The general management of swine will be studied from the standpoint of breeding, feeding, showing, marketing, and housing. Text books—Kleinheinz's "Sheep Management," Craig's "Sheep Farming," and Day's "Productive Swine Husbandry."

Two hours lecture.

Credit units 2.

Professor Garrigus.

(26) **Animal Husbandry 3d**

**Feeds and Feeding**—A study of adaptability of different feeds for horses, beef cattle, sheep and swine. Special attention will be given to practical methods of feeding and to the method of selecting the most economical feeds. Practice in feeding is offered. Prerequisite, Dairy Husbandry 3a. (6)

One hour lecture.

Two hours laboratory.

Credit units 2.

Mr. Skinner.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

**Lecture and Text-book course in Comparative Anatomy and Physiology**—A general description of the skeleton; structure and function of the respiratory organs; the digestive and urinary systems of the different domestic animals; the heart and blood vessels.

**General Pathology**—Inflammation, its cause and changes; abscess formation, fevers, blood poisoning, etc.

**Therapeutics**—Description of the common drugs, their therapeutic action and uses in disease; the various disinfectants and parasitic destroyers.

**Disease and Treatment**—Hygiene and general care of sick animal; causes and symptoms of most common diseases of animals with treatment that can be given by the herdsman; how they can be prevented; description of the contagious; infectious and parasitic diseases that affect domestic animals; their symptoms, how communicated and how prevented; the common cases of poisoning in cattle and sheep; diseases incident to breeding, obstetrics, and diseases of young animals. This course will also include the general principles of surgery, treatment of wounds and injuries.

Two hours lecture.

Credit units 2.

Dr. Dow.

#### Agronomy Department.

Prof. Slate, Mr. Helmick.

(28)

#### Agronomy 1a I, III.

**Field Crop Production**—A general course covering the fundamental principles and practices involved in growing corn, small grains, potatoes, tobacco, grasses, legumes, and root crops. As long as the weather permits, instruction is given in the field.

One hour lecture.

Four hours laboratory.

Credit units 3.

Mr. Helmick.

(29)

#### Agronomy 2a I, III.

**Soil Management**—A study of soils, their properties and management, in relation to crop production. This course covers the funda-

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

**Example:** Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

mental principles of soil fertility, including manures and fertilizers.  
Three hours lecture.  
Two hours laboratory.  
Credit units 4.  
Professor Slate.

(30) (Agronomy 3b)  
Offered in 1919-1920 and alternate years.

**Soil Fertility**—A detailed study of the literature, with field and laboratory problems.  
One hour lecture.  
Three hours laboratory.  
Credit units 2½.  
Professor Slate.

(31) Agronomy 4a

**Advanced Field Crops**—A course in experimental methods with field crops. Students electing this course will begin their work in the previous summer on the Experiment Station Farm as Field Assistants, a few such positions being available each season. The head of the department should be consulted before this course is elected.

Six hours laboratory.  
Credit units 3.  
Prof. Slate, Mr. Helmick.

(32) Farm Management 2b I, III.

**Elementary Farm Management**—A study of farm accounts; farming as a business; cropping systems; size, diversity, and production of business; farm layout; building arrangement; efficient use of labor, horses, and machinery; marketing; forms of tenure and leases; ways of starting farming; use of capital and credit; choosing and buying a farm; planning, organization and management of a farm.

Two hours lecture.  
Two hours laboratory.  
Credit units 3.  
Mr. ———.

- 
- I. Required in Agriculture-Science Course.  
II. Required in Mechanic Arts Course. ,  
III. Required in Teacher Training Course in Agriculture.  
IV. Required in Teacher Training Course in Home Economics.  
All studies are elective to students of whom they are not required.  
1 or A Freshman year                      2 or B Sophomore year  
3 or C Junior year                          4 or D Senior year  
a, c, or e First semester                  b, d, or f Second semester  
Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(33)

(Farm Management 4b)

Offered in 1919-1920 and alternate years.

**Advanced Farm Management**—A study of records, data, and other material, and of farms and regions visited, with discussions on methods of using farm management data, and the organization and management of farms visited. Prerequisite, permission to register and Farm Management 2b. (32)

Six hours laboratory.

Credit units 3.

Mr. \_\_\_\_\_.

(34)

Agricultural Engineering 1a I, II, III.

**Wood Working and Drawing**—The use of carpenter's tools in bench work and building construction, and the making of working drawings.

Three hours laboratory.

Credit units 1½.

Mr. \_\_\_\_\_.

(35)

Agricultural Engineering 1b I, III.

**Forging and Drawing**—Practice in forging iron and steel, and the making of working drawings.

Three hours laboratory.

Credit units 1½.

Prof. Fitts, Mr. \_\_\_\_\_.

(36)

Agricultural Engineering 2a I, III.

**Farm Machinery**—The operation, adjustment and repair of farm machinery and engines. The student becomes familiar with a number of makes of the standard tools and machines, excellent laboratory facilities being available.

One hour lecture.

Four hours laboratory.

Credit units 3.

Mr. \_\_\_\_\_.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(37)

(Agricultural Engineering 3a)

Offered in 1919-1920 and alternate years.

**Drainage and Irrigation**—A course in the laying out and construction of Drainage and Irrigation systems, with special reference to eastern conditions. Surveying and mapping of farms is included.

One hour lecture.

Three hours laboratory.

Credit units 2½.

Mr. \_\_\_\_\_.

(38)

(Agricultural Engineering 3b)

Offered in 1919-1920 and alternate years.

**Farm Buildings**—This course includes the drawing of plans and writing of specifications for farm buildings of all types. A special study is made of farm building layout.

One hour lecture.

Three hours laboratory.

Credit units 2½.

Mr. \_\_\_\_\_.

(39)

Agricultural Engineering 3d

**Advanced Farm Machinery**—A course for the training of farm machinery experts, special emphasis being laid on the tractor, thresher, binder, husker, and haying machinery.

Open to all students who have completed Agricultural Engineering 2a (36) or who satisfy the instructor that they can profitably take the course.

One hour lecture.

Three hours laboratory.

Credit units 2½.

Horticulture Department

Prof. Stevens, Prof. Hollister, Mr. Fraser, Mr. Moss.

(40)

Horticulture 1a

An introductory course in horticulture showing the importance of horticulture, the divisions of horticulture, and the distribution of

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



horticultural activities. The principles of plant growth and reproduction and the fundamental processes of control through these principles make an important part of the study. Acquaintance with the chief source of information among horticultural workers is an object of the course.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Stevens.

(41)

#### Horticulture 1b

The same repeated, if a sufficient number of students make election of it.

(41x)

#### Horticulture 1d IV.

**Housekeepers's Course**—A study of home garden making, ornamentation of home grounds, and the keeping of garden products.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. \_\_\_\_\_.

(42)

#### Horticulture 2

**Vegetable Gardening and Small Fruits**—A study of the climatic, topographic, and soil adaptions of garden crops, the methods of culture and management, remedies and preventives for diseases and noxious insects. The laboratory work will include seed study, germination, care of seeds, and planting, growing, harvesting and storage of vegetables and small fruit crops. Markets, preparation for market, methods of shipping and of selling will be given due consideration.

Three hours lecture.

Two hours laboratory.

Credit units 8.

Professor Stevens.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                  b, d, or f Second semester

Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(43)

### Horticulture 3a

**Practical Pomology**—A course designed to give a general knowledge of fruit growing, studied under the following heads: Selection of orchard sites and soils; propagation of young trees; laying out, planting and care of young orchards; pruning, fertilization and cultivation of orchards; harvesting and handling the fruit crop. One outside trip will be required.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Hollister.

(44)

### Horticulture 3b

**Stone Fruits and Grapes**—This course completes the work outlined in Course 3a and also takes up some work which can only be carried on in the spring. One outside trip required. Prerequisite, Horticulture 3a. (43)

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Hollister.

(45)

### Horticulture 3d

**Orchard Spraying**—A study of the more common spray materials and methods of preparation; the different types of spray pumps, nozzles and other equipment. When the weather permits the laboratory work will be in the orchard where instruction will be given by actually doing the work. Individual work in spraying will be arranged outside the regular laboratory periods.

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Hollister.

(46)

### Horticulture 3f

**Floriculture and Greenhouse Management**—A practical study of the florist's problems, such as location, types of houses, materials of

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b. d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

construction, cost and maintenance, heating, ventilating, preparation of soils for greenhouse crops, propagating, potting and shifting plants, watering, fumigating, etc.

The laboratory work consists of practical training in the greenhouse and gardens. A trip to commercial establishments will be required of the class.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. Fraser.

(47)

(Horticulture 4a)

Offered in 1918-1919 and alternate years.

**Conservation Horticulture**—A course designed to teach the conservation of horticultural products by reducing unsalable products to forms which will be used by every householder, fruit juices, evaporated fruits and vegetables, designed to teach more economy in transportation and storage, especially that which is in present demand, that of getting food to millions far away in the smallest possible bulk. Open to only a few students who desire to work along these special lines.

Three hours laboratory

Credit units 1½.

Professor Stevens.

(47x)

(Horticulture 4)

**Vegetables under Glass—Advanced Course**—A study of the production of vegetables under glass for commercial purposes, dealing in practice with lettuce, cucumbers, tomatoes, and other vegetables commonly grown out of season in this latitude. The adaptation of houses to economical production through proper heating, ventilating, watering, preparation of soils and the like will receive full consideration.

Hours to be arranged with the instructor.

Credits to be arranged with Secretary. Open to a limited number of students.

Mr. Stevens.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

II. Required in Mechanic Arts Course.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(48)

#### Horticulture 4c

**Systematic Pomology**—This course is a detailed study of varieties under the following heads: Description, nomenclature and classification; fruit scoring and use of the score card; fruit judging; selection of exhibition fruit and arrangement of exhibits. Prerequisite, Horticulture 3a and 3d. (43) (45)

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Hollister.

(49)

#### Horticulture 4e

**Commercial Floriculture**—The course deals with the growing of plants and cut flowers for the wholesale and retail markets, scoring and judging flowers and plants, design making, table decoration, and the use of cut flowers and plants in decorative work. Prerequisite, Horticulture 3f. (46)

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. Fraser.

(50)

#### Horticulture 4b

**Advanced Pomology**—This course considers the commercial aspect of fruit growing, and a study of the requirements of large orchards will receive attention, arrangements of the orchards, tools required, use of power machinery, securing of supplies, handling the labor; packing, and marketing the fruit; storage houses. One trip is required. Prerequisite Horticulture 3a and 3b. (43) (44)

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Hollister.

(51)

#### Horticulture 4d

**Landscape Gardening**—The course deals with the laying out of grounds, the grouping and planting of shrubs and trees, the making of plans for small places, the treatment of walks and drives, the use of

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                  b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

flower borders and of bedding plants, and the improvement of grounds already grown up. The requirements of country estates and of home gardens are particularly considered. Prerequisite, Horticulture 1a, 1b, or 3f. (40) (41) (46)

Two hours lecture.

Three hours laboratory.

Credit units  $3\frac{1}{2}$ .

Mr. Fraser.

(52)

(Forestry 4b)

Offered in 1918-1919 and alternate years.

This course is designed to give a general knowledge of the development and of the present forestry situation in the United States. Connecticut will be studied in detail. A short study of the economic trees of the United States, including logging and marketing will be made. The laboratory work will be handling of the farm woodlot, including estimating, improvement, harvesting and regeneration.

Two hours lecture.

Three hours field work.

Credit units  $3\frac{1}{2}$ .

Mr. Moss.

Botany Department.

Prof. Sinnott, Mr. Torrey.

(53)

Botany 1b I, III, IV.

**Introduction to Botany**—The morphology, physiology, ecology, and classification of plants, with especial emphasis on the higher forms.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Prof. Sinnott and Mr. Torrey.

(54)

Botany 2a

**The Higher Plants**—The morphology, physiology, and evolution of the vascular cryptogams and seed plants. Prerequisite, Botany 1b. (53)

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Sinnott.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(55)

**Botany 2b**

**The Lower Plants**—The structure and life histories of the algae, fungi, and mosses. Prerequisite, Botany 1b. (53)

Two hours lecture.

Four hours laboratory.

Credit units 4.

Mr. Torrey.

(56)

**(Botany 3a)**

**Offered in 1918-1919 and alternate years.**

**Genetics**—A general introductory course, aiming to present a knowledge of the laws of variation and inheritance, as a basis for the practical breeding of plants and animals.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Sinnott.

(57)

**(Botany 3c)**

**Offered in 1918-1919 and alternate years.**

**Plant Breeding**—The theory and practice of plant breeding. Open only to students in Botany 3a. (56)

Two hours laboratory.

Credit units 1.

Professor Sinnott.

(58)

**(Botany 3e)**

**Offered in 1919-1920 and alternate years.**

**Plant Pathology**—Diseases of plants with especial reference to those caused by parasitic fungi. A thorough study of a few types as a basis for control measures.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Mr. Torrey.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(59)

### Botany 3

**Advanced Botany**—A course for advanced students who desire to pursue a special line of work in botany. Opportunity will be given to acquire familiarity with the technique of killing and fixing various types of plant material, embedding in paraffin and celloidin, cutting microtome sections, and preparing and staining mounts. Each student will be expected to devote special attention to a particular problem, as an introduction to methods of investigation. Prerequisite Botany 1b and 2a or 2b and permission of the instructor. (53) (54) (55)

Laboratory only.

Hours and credits by arrangement.

Prof. Sinnott and Mr. Torrey.

(60)

### (Botany 3b)

Offered in 1918-1919 and alternate years.

**The Classification and Distribution of Flowering Plants**—This course aims to enable the student to recognize at sight the plants of the native flora. Attention is also given to the factors which determine plant distribution, and to the technique of collecting and herbarium work.

Students who intend to take the course are requested to consult the instructor before the end of the college year to arrange for summer field work.

One hour lecture.

Four hours laboratory.

Credit units 3 and additional for summer work by arrangement with the instructor.

Prof. Sinnott and Mr. Torrey.

(61)

### (Botany 4a)

Offered in 1919-1920 and alternate years.

**Plant Products**—A course dealing with the more important raw materials of botanical origin, and with the structure and distribution of the plants from which they are derived.

One hour lecture.

Two hours laboratory.

Credit units 2.

Prof. Sinnott.

- 
- I. Required in Agriculture-Science Course.
  - II. Required in Mechanic Arts Course.
  - III. Required in Teacher Training Course in Agriculture.
  - IV. Required in Teacher Training Course in Home Economics.
- All studies are elective to students of whom they are not required.
- |                           |                            |
|---------------------------|----------------------------|
| 1 or A Freshman year      | 2 or B Sophomore year      |
| 3 or C Junior year        | 4 or D Senior year         |
| a, c, or e First semester | b, d, or f Second semester |
- Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture Science course and the Teacher Training Course in Agriculture.

**Botanical Seminar**—Subject for 1919: The history of Botanical Science. Readings, reports, and discussions. Open to those who are taking Botany 3 (59) and to others by consent of the instructor.

One hour lecture.

Credit unit 1.

Prof. Sinnott.

**Bacteriology Department.**

Prof. Esten, Miss C. Mason.

(62)

**Bacteriology 2a**

**General Bacteriology**—This course will consider the following topics: History and scope of the subject. Forms and activities of bacteria. The relation of bacteria to the production and handling of milk. The use of bacteria in the making of butter and cheese. Bacteria and hygiene. Preventive medicine. The function of bacteria in producing soil fertility. Bacteria and nitrogen supply. Results of field experiments with bacteria in crop production.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Esten, Miss Mason.

(63)

**Bacteriology 2b**

**Dairy Bacteriology**—This course will be a study of the following topics: Special methods for finding the number of bacteria in milk. Preparation of special kinds of culture media for detection of varieties of bacteria. Effect of different groups of bacteria in milk, butter, and cheese. Sources of milk contaminations and their elimination. Bacteria in cream "starters" and commercial cultures for ripening of cream and cheese. Sanitary milk production and diseases which may be carried by milk. Prerequisite Bacteriology 2a. (62)

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Esten, Miss Mason.

- 
- I. Required in Agriculture-Science Course.
  - II. Required in Mechanic Arts Course.
  - III. Required in Teacher Training Course in Agriculture.
  - IV. Required in Teacher Training Course in Home Economics.
- All studies are elective to students of whom they are not required.
- |                           |                            |
|---------------------------|----------------------------|
| 1 or A Freshman year      | 2 or B Sophomore year      |
| 3 or C Junior year        | 4 or D Senior year         |
| a, c, or e First semester | b, d, or f Second semester |
- Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture Science course and the Teacher Training Course in Agriculture.

(64)

#### Bacteriology 2d IV

**Household Bacteriology**—Use of bacteria, yeasts and molds in the preparation and preservation of foods. A study of the yeasts, molds and bacteria that spoil foods. Care of milk in the home. The bacteriological principles of canning. Control of children's diseases and infectious diseases in general. The relation of the home to public health questions.

Two hours lecture.

Four hours laboratory

Credit units 4.

Professor Esten, Miss Mason.

(65)

#### Bacteriology 3a

**Soil Bacteriology**—This course will include the study of the work of bacteria in soil formation; the breaking down of rock materials soluble for plant foods; the relation of bacteria to the world's supply of nitrogen; and the preservation of fertilizers.

The work of bacteria on organic matter for the increase of humus in the soil and their agency in the production of a world's supply of food will be studied also. Prerequisite Bacteriology 2a. (62)

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Esten, Miss Mason.

(66)

#### Bacteriology 3b

**Technical Bacteriology**—This will be a course in preparation for for teaching bacteriology or for positions in public health and milk testing laboratories. It will include pathogenic problems, control of communicable diseases, equipment of laboratories, preparation and use of culture media, stains, etc., the theory of immunity, special health problems, control of healthful water supplies and sewage systems, and sanitation on the farm. The class will have seminar work and discussions on special topics. Prerequisite Bacteriology 2a.

(62)

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Esten, Miss Mason.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(67)

### **Bacteriology 4**

Seminar work and special lines of investigation. Hours to be determined in consultation with Professor Esten.

Credit units by reference to the secretary.

### **Zoology Department.**

Prof. Lamson, Mr. Manter.

(68)

### **Physiology and Comparison.**

**Anatomy**—This course is a study of the most important physiological processes of animals and the elements of comparative anatomy. The class will dissect the sea anemone, starfish, nereis, clam, crayfish, grasshopper, dogfish and frog, and will study under the microscope the amoeba, paramoecium, vorticella, sponge spicules, hydra and the rotifers.

Special emphasis is placed upon the study of those animals that cause or carry diseases. Field work is given in this subject.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Lamson and Mr. Manter.

(69)

### **Entomology 2a**

**Elementary Entomology**—This course deals with the study of the elements of insect structure, development and classification, and the essentials regarding the most important economic insects attacking garden, orchard, and forest products.

Insects are studied in reference to their relation to plants, their methods of attack, the amount of injury they cause, their relation to man, and their relation to other animals. Field work is given in this subject.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Professor Lamson and Mr. Manter.

(70)

### **Entomology 2b**

**Economic Entomology**—This course will be a study of the most important insect pests, especially those of the orchard, garden, field, and forest. The life histories and habits will be studied in detail in

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



an effort to give a basis for the better appreciation of the control methods recommended. The aim of the laboratory and field work will be to train the student to detect insect injury and to identify the species at work. Prerequisite, Entomology 2a. (69)

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. Manter.

(71) **Geology 2b**

**Elementary Geology**—This course is a study of the elements of structural and historical geology. The most common rocks are studied both in the class room and in the field. A collection is made by the student.

Special emphasis is placed upon the relation of rock formations to the soil, the effects of rivers and glaciers, and the evidence in the rocks of the history of animal and plant life.

Three hours lecture.

Credit units 3.

Professor Lamson.

(72) **(Entomology 3a)**

Offered in 1918-1919 and alternate years.

**Advanced Entomology**—This course will include insect morphology, physiology, and taxonomy. Prerequisite, Entomology 2a. (69)

Two hours lecture.

Two hours laboratory.

Credit units 3.

Mr. Manter.

(73) **Physiology 3a IV**

**Physiology of Nutrition and Hygiene**—A course treating the elements of anatomy, physiology and hygiene of the human body, with special emphasis upon the physiology of digestion and the prevention of diseases.

Four hours lecture.

Credit units 4.

Professor Lamson.

- 
- I. Required in Agriculture-Science Course.
  - II. Required in Mechanic Arts Course.
  - III. Required in Teacher Training Course in Agriculture.
  - IV. Required in Teacher Training Course in Home Economics.  
All studies are elective to students of whom they are not required.  
1 or A Freshman year                      2 or B Sophomore year  
3 or C Junior year                          4 or D Senior year  
a, c, or e First semester                  b, d, or f Second semester  
Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(74)

(Zoology 3b)

Offered in 1918-1919 and alternate years.

**Parasitology**—A study of the external and internal parasites of man and the domestic animals. This course treats their identification, structure, life history, and prevention. Prerequisite, Zoology 1a. (68)

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Lamson.

(75)

(Entomology 4)

Offered in 1919-1920 and alternate years.

**Advanced Economic Entomology**—This course is intended for those who wish to give special study to this subject, either to supplement their work in agriculture or science, or to furnish a preparation for future entomological work.

Among the subjects considered will be the following: Insect behavior, insect ecology, insect photography, entomological literature, insects in relation to plants, animals, and to each other, insects in relation to transmission of disease, natural enemies, insecticides, and insect control. Each student will be assigned a special problem so that he may have practice in experimental and investigational methods.

Prerequisite, Entomology 2b. (70)

Two hours lecture.

Four hours laboratory.

Credit units 8.

Mr. Manter.

**Chemistry Department**

Prof. Newton, Mr. Hughes.

(76)

**Chemistry 1b**

**Elementary General Chemistry**—This course offers an elementary study of general chemistry as outlined in the first half of Alexander Smith's "Elementary Chemistry," and "Laboratory Outline of Elementary Chemistry."

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III.. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

Required for students who have had no previous training in the subject and for those who have not satisfactorily completed a similar course in an accredited secondary school.

Two hours lecture.

Four hours laboratory.

Credit units 4

Professor Newton and Mr. Hughes.

**(77) Chemistry 2 I, II, III, IV.**

The work of the first semester is devoted to a study of the fundamental principles of chemistry in connection with the descriptive and qualitative chemistry of the metallic elements. A further study of the fundamental principles of chemistry in connection with the descriptive and qualitative chemistry of the non-metallic elements is given in the second semester. During both semesters attention is given to the important concepts of heat, light, and electricity in their relation to the science. The lectures of the course are arranged to precede the work of the laboratory where the student is expected to verify the principles and facts discussed in the lecture room by solving some fifty problems in elementary qualitative analysis. In solving these laboratory problems special stress is laid upon training the student in careful manipulation, thoroughness of observation, arriving at correct conclusions, and proper note taking. Prerequisite, Chemistry 1b (76) or a satisfactory secondary school course.

Two hours lecture.

Four hours laboratory.

Credit units 8.

Professor Newton and Mr. Hughes.

**(78) Chemistry B II.**

A continuation of the work of Chemistry 2 in the systematic analysis of inorganic substances presented from the modern ionic viewpoint. It is intended that the work of this course shall broaden the student's knowledge of inorganic chemistry, give ample practice in manipulation, and emphasize the principles involved in chemical analysis. After the student has become expert in the analysis of un-

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

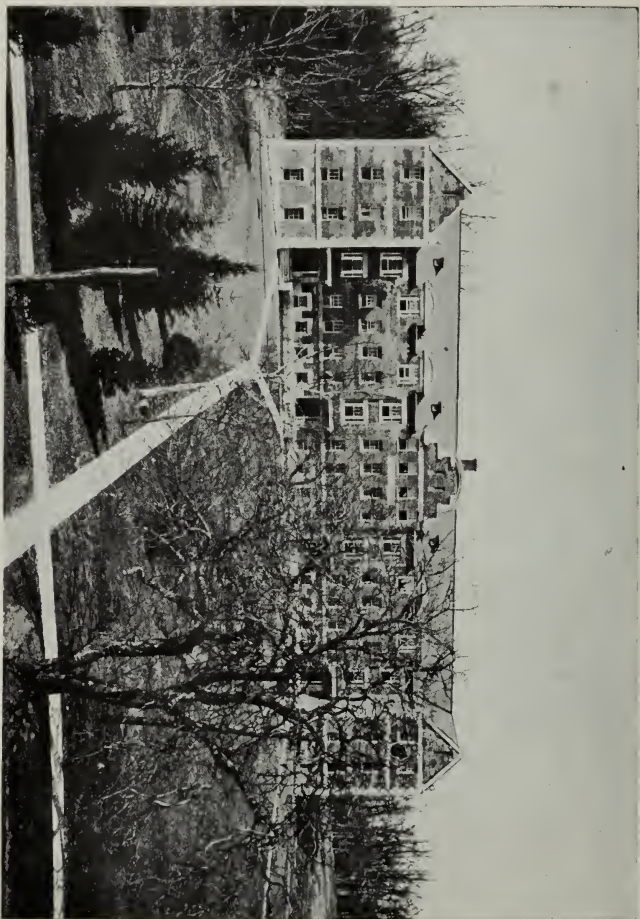
3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



STORRS HALL, MEN'S DORMITORY



KOONS HALL, MEN'S DORMITORY



known mixtures prepared in the laboratory, he will be required to analyze unknown industrial products, such as fertilizers, insectides, paints, and the like. This course serves as an introduction to quantitative analysis, and should be taken by all who intend to follow chemistry as a vocation. Texts, A. A. Noyes, "Qualitative Analysis"; Stieglitz, "Qualitative Chemical Analysis, Vol. I, Theoretical.

Two hours lecture.

Four hours laboratory.

Credit units 8.

Professor Newton and Mr. Hughes.

(78x)

#### Chemistry 3a IV.

**Chemistry and Dyeing of Textile Fibers**—The lectures and laboratory work will deal with the classification of textile fibers, their ultimate composition, their action toward acid and alkali, and qualitative and quantitative differentiation tests. The more common processes such as mercerization, fireproofing of cotton and the making of artificial silk will be considered. Under the subject of dyeing, attention will be paid to the nature of the dyeing process, classification of dyes, study and use of typical acid, basic, substantive, sulfur and mordant dyes. Special attention will also be given to dyeing in the household.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Newton.

(78y)

#### Chemistry 3b IV.

**Food Chemistry**—The lecture room work of the course will consist of a discussion of the analytical and descriptive chemistry of the different classes of food stuffs together with the interpretation of results connected with state and government food inspection and legislation.

In the laboratory the student will have practice in the analysis of different food stuffs and in addition to the regular laboratory work each student will be obliged to complete a detailed report concerning some one particular food material, its forms of adulteration and the

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year

2 or B Sophomore year

3 or C Junior year

4 or D Senior year

a, c, or e First semester

b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

most rapid way of detecting them, accompanied with actual figures obtained from the laboratory data.

One hour lecture.

Four hours laboratory.

Credit units 3.

Professor Newton.

(79)

(Chemistry 3 IV.)

Offered in 1919-1920 and alternate years.

**Organic and Physiological Chemistry**—The work of the first semester, in the lecture room, consists of a study of the more important classes of organic compounds such as the aliphatic and aromatic hydrocarbons, alcohols, phenols, and others. The lectures are illustrated by lecture table experiments and prepared compounds from the chemical museum. In the laboratory the student is made familiar with the operation and apparatus involved in organic work, such as fractional distillation, crystallization, determination of melting and boiling points, and with various methods of preparation, such as saponification, nitration, sulphonation, reduction and oxidation. The work of this course is preparatory to the work of the following semester.

Lectures and laboratory work on nutrition as related to both humans and the domestic animals is the principal subject of study in the second semester. This study treats of the chemistry of the proteins, fats and carbohydrates; enzymes and their action; the cell and its direct nutrition; blood and lymph as carriers of nutrients to the cell, and waste products from the cell; the production and repair of tissues; the excretions, including the urine and feces as carriers of waste products. The course also includes further instruction in the subject of organic chemistry so far as it applies to the subject of physiology. Text, Hawk, "Practical Physiological Chemistry."

One hour lecture.

Four hours laboratory.

Credit units 6.

Professor Newton and Mr. Hughes.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III.. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(80)

(Chemistry 4)

Offered in 1918-1919 and alternate years.

In this course one half of the first semester is devoted to gravimetric analysis and the other to volumetric analysis. This work is regarded as preliminary training for the problem work of the second semester and the time is spent upon processes which are typical of the two divisions of the subject. Much stress is laid upon the accuracy, care, and intellectual honesty necessary for successful quantitative work. Attention is given to the modern theory of solution and to stoichiometry as applied to quantitative analysis. Texts, Gooch, "Representative Procedures in Quantitative Chemical Analysis," Treadwell, "Analytical Chemistry, Vol. 2."

In the second semester each student is given one or more problems which may be solved, in part at least by analytical chemistry. Through the solution of these problems he becomes acquainted with the methods of research and the proper use of literature in the field of chemistry.

Eight hours laboratory.

Hours by appointment.

Credit units 8.

Professor Newton.

Department of Languages and History.

Prof. Monteith, Dr. Hays, Mr. Campbell, Miss Whitney, Miss Wallace.

(81)

English 1 I, II, III, IV.

**Composition-Rhetoric**—The aim is the acquisition of skill in correct expression oral and written. Text, "Boynton's Principles of Composition," with readings in literature and current magazines.

Three hours lecture.

Credit units 3.

Dr. Hays.

(82)

English 2 I, II, III, IV.

**English Literature**—A general course in English literature, the aim of which is an understanding and appreciation of the great writers, and of the forms into which literature naturally falls. Lectures and conferences. Text, Long.

Two hours.

Credit units 4.

Professor Monteith.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(83)

### English 3

**English Literature**—A study of the English writers of the eighteenth and nineteenth centuries. Lectures and readings.

Two hours.

Credit units 4.

Professor Monteith.

(84)

### Public Speaking 3b IV.

This course will include fundamentals in the use of voice and body; practical application in speaking and debating; extemporaneous speaking, and the preparation of original speeches. The aim of the course is to develop the power to think when upon the feet and to secure a vocabulary of delivery as well as of composition.

Two hours lecture.

Credit units 2.

Miss Wallace.

(85)

### Public Speaking 4

This course will be advanced work. Practical problems will be chosen to develop the prerequisite course. It is designed for students who intend to work in the extension service. Prerequisite, Public Speaking 3b. (84)

One hour lecture.

Credit units 2.

Miss Wallace.

(86)

### Journalism 3a

**News Writing**—Open to Freshmen and Sophomore students showing particular adaptability and sufficient fundamental training.

A study of news values and news writing taking up the recognition and collection of material for news stories and the proper construction of them.

A drill in general news writing is given as well as training in the handling of agricultural and home economics material as news.

This course is fundamental and is a basis for advanced work in Journalism.

Two hours lecture.

Credit units 2.

Mr. Campbell.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(87)

### Journalism 3b

**Publicity**—A study of the use of publicity in agricultural education taking up the relationship of agricultural leaders to all educational agencies, including the Press.

The use of bulletins, posters, circular letters, news letters to the press, plate matter, formal press bulletins, and other forms of publicity are discussed as well as proper organization of a definite campaign to put across a given program.

Two hours lecture.

Credit units 2.

Mr. Campbell.

(88)

### Agricultural Journalism 3

**Reporting and Editing**—This course is designed as a regular meeting of the staff of the college paper and others interested for discussion of the best methods of conducting the paper.

Preparation of copy for the printer, head writing, the effective use of illustration, type values and general makeup are considered.

The fundamentals of reporting and editing are considered and the results as evidenced in the college paper discussed and criticised.

One hour lecture.

Credit units 2.

Mr. Campbell.

(89)

### French A

**Military French**—A course in spoken French to acquire familiarity with terms used in military life. Text: Wilkins and Coleman-Army French. Open to all students in Military Art.

Three hours lecture.

Credit units 6.

Dr. Hays.

(90)

### French I, II.

**Elementary French**—First lessons, reading and composition. The aim is the acquisition of correct pronunciation and ability to read and write French.

Three hours lecture.

Credit units 6.

Dr. Hays.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(91) **French II, II.**

**Intermediate French**—A course in reading of stories, plays, letters and short poems, with exercises in French composition. Prerequisite, French I (90)

Three hours lecture.

Credit units 6.

Dr. Hays.

(92) **French 3**

**French Literature**—A general course in French literature of the 17th, 18th, and 19th centuries with special emphasis on the drama. Lectures and readings. Prerequisite, French 2. (91)

Three hours lecture.

Credit units 6.

Professor Monteith.

(93) **German 1**

**Elementary German**—A course in the reading of elementary German texts, with grammar and composition work.

Three hours.

Credit units 6.

Miss Whitney.

(94) **German 2**

**Advanced German**—A more advanced course in the rapid reading of texts more difficult than in the preceding course, with attention to grammar and composition, and special emphasis upon Scientific German I. (93) Prerequisite German I. (93)

Three hours.

Credit units 6.

Miss Whitney.

(95) **(History 2b)**

**Offered in 1919-1920 and alternate years.**

**Social and Industrial History**—This is a course for the study of the great forces in the world's history which have had special bearing upon the social and industrial fabric of society.

Parties the second. Required readings and lectures.

Credit units 3.

Mr. \_\_\_\_\_.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III.. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(96)

### History 3 I. III.

**Constitutional History of the United States**—The Constitutional Convention of 1787, Organization of the Government, Banking and Tariff Legislation will be emphasized the first semester, and Political Parties the second. Required reading and lectures.

Three hours.

• Credit units 6.

Professor Monteith.

(97)

### History 4

**Modern European History**—After a general survey from the fall of the Roman Empire the history of Europe is studied in detail from Louis XIV to the French Revolution, the first semester, and from the French Revolution to the formation of the German Empire the second. Readings and lectures.

Two hours.

Credit units 4.

Professor Monteith.

### Economics Department.

Prof. Smith, Mr. Price

(98)

### (Sociology 4a)

Offered in 1919-1920 and alternate years.

**An Introduction to Sociology**—A course dealing with the coordination and integration of the factors in human progress, having particular reference to rural social organization.

Four hours.

Credit units 4.

Professors Eaton, Smith, Messrs. Price, Baker, Davis, Brundage and others.

(99)

### Economics 2a

**The Geography of Commerce**—A study, through text, discussion and lectures of the facts and principles of commerce and the commercial development of nations. The importance of **natural physical conditions** as determinants of commerce is emphasized, as well as that of transportation and exchange facilities. Ports and ocean trade routes

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

are also considered. The more important commodities of commerce are studied and the region of their production, their markets and prices. Finally a comparison is made of the chief commercial countries of the world.

Three hours lecture.

Credit units 3.

Mr. Price.

(100) **Economics 3a I, II, III.**

**Elementary Economics**—This is a course dealing with the nature and scope of economics; the evolution of economic society; definition of economic terms; the character and forms of wealth; the part played by land, labor and capital in the production of wealth; the consumption of wealth; the principles of value and price; monopoly; the types of business organization, including corporations; the principles of money and banking and international trade.

The work will be based upon a text, lectures, assigned readings and written papers.

Three hours lecture.

Credit units 3.

Mr. Price.

(101) **Economics 3b I, II, III.**

**Elementary Economics (continued)**—The distribution of wealth in the form of rent, interest, wages, and profits, labor problems, transportation, insurance, socialism, taxation, and public finance will be studied in this course.

The work will be based upon a text, lectures, assigned readings and written papers. Prerequisite, Economics 3a. (100)

Three hours lecture.

Credit units 3.

Mr. Price.

(102) **(Economics 4a)**

**Offered in 1919-1920 and alternate years.**

**Agricultural Economics**—In general this will be a study of the three factors of production, land, labor and capital, as applied to

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course. ,

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

agriculture. Special attention will be given to certain problems such as the shift in population, land valuation, agricultural labor and wages, land tenure and rural credit; including a thorough study of the Federal Farm Loan System.

The work will be based upon a text, lectures, assigned readings and a thesis. Prerequisite, Economics 3a and 3b. (100) (101)

Three hours.

Credit units 3.

Mr. Price.

(103)

#### Economics 4b

**The Marketing of Farm Products**—This is a course dealing with the fundamentals of marketing; methods of sale; the wholesale produce trade; sale by auction; cold storage as a factor in marketing; transportation and marketing; the prices of farm products; produce exchanges and speculation; city markets; parcel post marketing and co-operative marketing.

This work will be based upon a text, lectures and investigations. Prerequisites, Economics 3a and 3b. (100) (101)

Three hours lecture.

Credit units 3.

Mr. Price.

(104)

#### Economics 4d

**Money and Banking**—A study of the principles of money, coinage and coinage laws, legal tender, the relation of money and prices, bimetalism, the kinds of banks and the services they render, the national banking systems of this and other countries, with special attention to the Federal Reserve System. Prerequisites, Economics 3a and 3b. (100) (101)

Three hours lecture.

Credit units 3.

Mr. Price.

- 
- I. Required in Agriculture-Science Course.
  - II. Required in Mechanic Arts Course. ,
  - III. Required in Teacher Training Course in Agriculture.
  - IV. Required in Teacher Training Course in Home Economics.
- All studies are elective to students of whom they are not required.
- |                           |                            |
|---------------------------|----------------------------|
| 1 or A Freshman year      | 2 or B Sophomore year      |
| 3 or C Junior year        | 4 or D Senior year         |
| a, c, or e First semester | b, d, or f Second semester |
- Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(105)

(Economics 4f)

Offered in 1918-1919 and alternate years.

**Railroad Transportation**—This course deals with the history and principles of railroad transportation. Consideration is given to railway management; freight classification; rate making; express and mail service; state and federal legislation and regulation, with special attention to recent developments of federal control and the problems of Government ownership.

The work will be based upon lectures, a text and assigned readings.

Prerequisite, Economics 3a. (100)

Three hours lecture.

Credit units 3.

Mr. Price.

(106)

Education 3a III, IV.

**The Philosophy of Education**—A study of present day organization and administration of schools in the light of educational theory; the social aspects of education; the values, principles and aims of education as exemplified in the curriculum.

Three hours lecture.

Credit units 3.

Professor Eaton.

(107)

Education 3c III, IV.

**Educational Psychology**—A study of the laws of learning.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Eaton.

(108)

Education 3b III, IV.

**The Principles of Teaching**—A study of the relations of teacher and pupil; class management; types and methods of teaching. Prerequisites, Education 3a and 3c. (106) (107)

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Eaton.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(109)

**Education 3d III.**

**The Teaching of Agriculture**—A study of organization, method, and procedure, in the teaching of agriculture in secondary schools. Prerequisite, Education 3a, 3c, and 3b. (106) (107) (108)

Two hours lecture.

Two hours laboratory

Credit units 3.

Professor Eaton.

(110)

**Education 3f IV.**

**The Teaching of Home Economics**—The course will consist of a survey of the field of home economics, the problems that arise in its teaching, comparison of courses of study, the use of text-books and illustrative material, the discussion of class room methods and technique, problems in cooking and sewing adapted to pupils' needs, equipment of Home Economics laboratories, and like topics. Practice in planning lessons and courses of study adjusted to meet varying conditions will be emphasized, and individual work required of students in observation of classes and the preparation and teaching of a series of lessons in the schoolrooms in the neighborhood of the college. Prerequisites, Education 3a, 3c and 3b. (106) (107) (108)

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Sprague.

**Mathematics Department.**

Professor Wheeler.

(111)

**Physics 2a II.**

**Mechanics**—This course aims to familiarize the student with the principles underlying machines of every sort, power in its manifold applications, and inventions. Physics is the basis of engineering and is useful in the home and on the farm. The elements of mechanics, of heat, and of electricity, will be treated during the first semester.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Wheeler.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(112)

**Physics 2b II.**

**Electricity, Sound, Light**—a continuation of Physics 2a—In this course a more intensive study of electricity will be made, and the elements of sound and light studied.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Wheeler.

(113)

**Physics B IV.**

**Physics of the Household**—An elementary course in the general principles of mechanics, heat, and electricity with laboratory work in the application of these principles to household appliances.

Two hours lecture.

Two hours laboratory.

Credit units 6.

Professor Wheeler.

(114)

**Mathematics A**

**Military Field Engineering**—This is a war emergency course subject to withdrawal at the close of the war.

The course is based on Leach's Engineer's Field Manual, Professional Paper No. 29, Corps of Engineers, United States Army. Military surveying, including pacing and instrumental surveying, map making and assembling, reduction and reproduction, and military sketching form one part. The construction to scale of model spar, timber, and pontoon bridges, and incidentally a study of ropes, knots, timber, and iron used in construction, roads, railroads, animal transport, and field fortifications, form the second division of the course.

Four hours laboratory.

Credit units 4.

Professor Wheeler.

(115)

**Mathematics I II.**

**Advanced Algebra, Trigonometry, Solid Geometry**—The course is based on Kenyon and Lovitt's Mathematics for Agriculture and Science.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

Advanced Algebra will include binomial expansion, progressions, permutations, combinations, probability, correlation, empirical equations, annuities and the law of compound interest.

Plane Trigonometry includes the solution of right and of oblique triangles, and the proof of all formulas used. Twenty individual problems must be solved by each student.

Solid Geometry will be introduced by practice in drawing lines, planes, and combinations of these, to represent models illustrating the problems.

Three hours.

Credit units 6.

Professor Wheeler.

(116) **Mathematics 2a II.**

**Analytic Geometry**—This course will include loci and their equations, the straight line, the circle, the polar system, the parabola, the ellipse, and the hyperbola. Much practice will be given in graphic representation of equations and in deriving equations from plotted values.

Four hours.

Credit units 4

Professor Wheeler.

(117) **Mathematics 2b II.**

**Descriptive Geometry**—There will be recitations and drawing exercises in the solution of geometrical problems by orthographic projection, in this course.

One hour lecture.

Two hours laboratory.

Credit hours 2.

Professor Fitts.

(118) **Mathematics 3a II.**

**Differential Calculus**—This course will include functions, differentiation, expansion of functions, indeterminate forms, representation of various curves, directions of curves, maxima and minima, evolutes and involutes.

Four hours.

Credit units 4.

Professor Wheeler.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(119)

**Mathematics 3c II.**

**Plane Surveying**—A course in elementary surveying, including field practice with compass, level, and transit, and office practice in mapping and computation. Text-books: Tracy's Plane Surveying and Tracy's Exercises in Surveying.

One hour lecture.

Three hours laboratory.

Credit units 2½.

Professor Wheeler.

(120)

**Mathematics 3b II.**

**Integral Calculus**—Elementary forms of integration, trigonometric integrals, application of integration to plane curves to find areas enclosed, length of curve, etc., and successive integration will be studied in this course.

Four hours.

Credit units 4.

Professor Wheeler.

(120x)

**Mathematics 3f II.**

**Factory Management**—This course will consist of bookkeeping practice, including the voucher system, cost accounting, and a study of scientific factory management.

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Wheeler.

**Mechanic Arts Department.**

Professor Fitts, Professor Wheeler.

(121)

**Mechanic Arts 1 II.**

**Mechanical Drawing**—In this course the use of the drawing board, T square and triangles will be explained and demonstrated. The course will include the following exercises: drawing straight lines, cross hatching, geometrical problems, inking, shading, projection of points,

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                  b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

lines. planes and solids, curves, shadows, and perspective, tracing and blue-printing.

Three hours laboratory.

Credit units 3.

Professor Fitts.

(122) **Mechanic Arts 1b II.**

**Wood Turning**—There will be instruction in the care of the engine and motor in this course. Each student in his turn will act as engineer. There will be exercises in wood turning, including work between work centers, face plating, chucking, finishing and polishing.

Three hours laboratory.

Credit units 1½.

Professor Fitts.

(123) **Mechanic Arts 2a II.**

**Pattern Making and Foundry**—This course includes the making of simple patterns and core boxes, with instruction concerning draft, finish, shrinkage and woods, and it is concluded by the molding and casting of the patterns made. The casting will be done in soft metal.

Four hours laboratory.

Credit units 2.

Professor Fitts.

(124) **Mechanic Arts 2b II.**

**Machine Joinery**—In this course various articles of furniture and farm appliances will be made on the wood-working machines. Bench work will be eliminated as far as possible. Factory methods of quantity production will be explained and demonstrated.

Four hours laboratory.

Credit units 2.

Professor Fitts.

(125) **Mechanic Arts 2d II.**

**Machine Drawing**—This course is detail and assembly drawing of simple machine parts.

Three hours laboratory.

Credit units 1½.

Professor Fitts.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(126)

**Mechanic Arts 3 II.**

**Machine Shop**—This course includes general care of shop and machines, and centering boring, turning, chucking, thread cutting, taper turning and face plate work on the engine lathe, combined with bench work and exercises on the shaper, drill and other machines.

Three hours laboratory, first semester.

Four hours laboratory, second semester.

Credit units  $3\frac{1}{2}$ .

Professor Fitts.

(127)

**Mechanic Arts 3a II.**

**Machine Elements**—Drawing out various mechanical problems in the use of belts, gears, levers, and other machine parts.

Three hours laboratory.

Credit units  $1\frac{1}{2}$ .

Professor Fitts.

(128)

**Mechanic Arts 3c II.**

**Direct Currents**—This course is a study of direct currents as furnished by dynamos and cells and their application for commercial use.

Three hours lecture.

Credit units 3.

Professor Fitts.

(129)

**Mechanic Arts 3b II.**

**Alternating Currents**—Alternating currents, their transmission, transformers and their application for commercial use as compared with direct currents, will be studied in this course.

Three hours lecture.

Credit units 3.

Professor Fitts.

(130)

**Mechanic Arts 3d II.**

**Forging**—The exercises consist of the drawing, welding and bending of iron, the forging, filing and tempering of steel and the making of machine tools.

Three hours laboratory.

Credit units  $1\frac{1}{2}$ .

Professor Fitts.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture Science course and the Teacher Training Course in Agriculture.

(131) **Mechanic Arts 3f II.**

**Applied Mechanics**—This course will include horse-power, energy, forces acting at a point, center of gravity, friction, uniform acceleration, and practical problems.

Three hours lecture.

Credit units 3.

Professor Wheeler.

(132) **Mechanic Arts 4 II.**

**Power Plants**—This course will include the study of elementary steam power plants, fuel and combustion, boilers, stokers, superheaters, chimneys, draft, steam engines, condensers, separators, pumps, and other apparatus.

Three hours lecture.

Two hours laboratory.

Credit units 8.

Professor Wheeler.

(133) **Mechanic Arts 4a II.**

**Internal Combustion Engines**—This course is a study of the principles and design of the cycle and two cycle types including a brief study of the Diesel and semi-Diesel types. The laboratory work will consist in the taking down and repairing of one or more engines and the setting up, testing and adjusting of the same engines.

Two hours lecture.

Two hours laboratory

Credit units 3.

Professor Fitts.

(134) **Mechanic Arts 4b II.**

**Mechanics of the Automobile**—This course is a study of the mechanics of the automobile, and the taking down, assembling and adjusting of the various parts.

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Fitts.

- 
- I. Required in Agriculture-Science Course.  
II. Required in Mechanic Arts Course.  
III. Required in Teacher Training Course in Agriculture.  
IV. Required in Teacher Training Course in Home Economics.  
All studies are elective to students of whom they are not required.  
1 or A Freshman year                      2 or B Sophomore year  
3 or C Junior year                          4 or D Senior year  
a, c, or e First semester                  b, d, or f Second semester  
Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester. and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(135)

**Mechanic Arts 4c II.**

**Hydraulics**—This course is a study of flow and discharge of streams, pipes and sewers, and of hydraulic plants for power.

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Wheeler.

(136)

**Mechanic Arts 4d II.**

**Materials of Engineering**—This course will be a study of the sources, manufacture and properties of important materials used in engineering; the mixing and testing of cements and concretes.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Professor Wheeler.

(137)

**Mechanic Arts 4c II.**

**Thermodynamics**—Thermodynamics include a study of the properties of gases, saturated and superheated vapors, especially of air and steam, of the flow of fluids through orifices, nozzles, and pipes, and of the various cycles of hot air engines, internal combustion and steam engines, of the turbine, the air compressor, and of refrigerating systems.

One hour lecture.

Two hours laboratory.

Credit units 2.

Professor Wheeler.

(138)

**Mechanic Arts 4f II.**

**Engineering Seminar**—In this course there will be discussion of original problems, a review of current technical journals, supplemented with an occasional lecture or demonstration by a technical man not connected with the college.

Two hours lecture.

Credit units 2.

Professor Fitts.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III.. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

**Home Economics Department.**

Prof. Sprague, Miss Rose, Miss Mason.

(139)

**Home Economics 1a IV**

**Plain Sewing and Drafting**—This course includes extensive practice in hand and machine sewing by direct application in making and repairing simple garments, and instruction in drafting and use of patterns with special reference to the needs of those who are to teach sewing.

Two hours lecture.

Four hours laboratory.

Credit units 4

Miss Mason.

(140)

**Home Economics 1b IV**

**Cookery**—This course teaches the principles underlying the preparation of different types of food; the processes of cooking; the use of utensils; the preparation and serving of economical meals.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Miss Rose.

(141)

**Home Economics 2a IV.**

**Dressmaking and Design**—This course provides instruction in drafting, cutting, fitting and making waists, skirts and simple gowns and in the choice of materials from standpoint of economy and beauty. Good design is emphasized.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Miss Mason.

(142)

**Home Economics 2c IV.**

**Household Management**—A study of the technique of the household processes, of repair tools, utensils, labor saving devices, laundry practices, sanitation and the systematic planning of the daily routine.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

The laboratory work in this course is provided through rotation assignments to the management of Grove Cottage.

Two hours lecture.

Credit units 2.

Miss Rose and Miss Mason.

(143) Home Economics 2b IV.

**Food Economics**—This course includes experimentation with recipes; practice in planning, preparing and serving meals to family groups; and the items of cost and time.

Two hours lecture.

Four hours laboratory.

Credit units 4.

Miss Rose.

(144) Home Economics 2d IV.

**House Construction**—This course provides a study of the development of shelter; the principles of house construction; the selection of proper sites; the installation of water and lighting systems; a study of furniture and interior decoration; the problems of materials and relative value; city planning and laws relating thereto.

Two hours lecture.

Credit units 2.

Professor Pitts or Mr. ———.

(145) Home Economics 3a IV.

**Textiles and Laundering**—A course in the study of household textiles, their sources, manufacture, adulterations, identification and economic use of fabrics; and in the care, cleaning and laundering of fabrics.

One hour lecture.

Four hours laboratory.

Credit units 3.

Miss Mason.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                      4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

(Example: Agronomy 1a, I, III.) The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.



(146) Home Economics 3 IV.

**Nutrition and Dietaries**—This course presents the fundamental principles of human nutrition and their application to dietaries, with a study of proper diet for infants, children and the sick, and with especial regard to economic and social conditions.

Two hours lecture.

Two hours laboratory.

Credit units 6.

Miss Rose.

(147) Home Economics 3b IV.

**Millinery and Design**—(a) This course includes practice in making and covering frames and in the preparation of trimmings. (b) This course gives a knowledge of the principles of design and color with practical application.

One hour lecture.

Four hours laboratory.

Credit units 3.

Miss Mason.

(148) Home Economics 4a IV.

**Household Administration**—The purpose of this course is to secure an intelligent judgment in the expenditure of the family income, a systematic study of household accounts and the cost of living. Seniors will be given charge of the rotation practice groups at Grove Cottage.

Three hours lecture.

Two hours laboratory.

Credit units 4.

Prof. Sprague, Miss Rose and Miss Mason.

(149) Home Economics 4c IV.

**Home Nursing and the Care of Children**—This course provides instruction in the treatment of emergencies and in simple methods of caring for the sick, for infants and young children.

Two hours lecture.

Two hours laboratory.

Credit units 3.

Miss Driscoll.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year

2 or B Sophomore year

3 or C Junior year

4 or D Senior year

a, c, or e First semester

b, d, or f Second semester

**Example:** Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

**Marketing for the Consumer**—This course presents the problems of retail and community markets from the standpoint of the head of the household. Seniors in the course will do the marketing for the practice groups and will make trips to various markets in the state.

Three hours lecture.

Credit units 3.

Prof. Sprague, Miss Rose, Prof. Smith and others.

#### Department of Military Instruction.

Colonel John S. Parke, U. S. A., Retired.

Military Drill is required of all male students in College or School during the full period of residence. Only such as are shown upon physician's examination to be physically unfit are exempt.

#### (151) Military Art 1a I, II, III.

**Practical**—Physical drill, Infantry drill, sighting, position and aiming drill, gallery practice, nomenclature and care of rifle and equipment.

**Theoretical**—Theory of target practice, military organization, map reading, service of security, personal hygiene.

Three hours.

Credit units 1½.

#### (152) Military Art 1b I, II, III.

**Practical**—Physical drill, Infantry drill, bayonet combat, intrenchments, first-aid instruction, range and gallery practice.

**Theoretical**—Lectures, general military policy as shown by military history of United States and military obligations of citizenship, service of information, U. S. Infantry Drill Regulations.

Three hours.

Credit units 1½.

#### (153) Military Art 2a I, II, III.

**Practical**—Physical drill, Infantry drill, bayonet combat, intrenchments, first-aid instruction, range and gallery practice.

**Theoretical**—U. S. Infantry Drill Regulations, Small-Arms Firing Manual, lectures, map reading, camp sanitation and camp expedients.

Three hours.

Credit units 1½.

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(154) Military Art 2b I, II, III.

**Practical**—Physical drill, Infantry drill, bayonet combat, intrenchments, first-aid instruction, range and gallery practice, semaphore and flag signaling.

**Theoretical**—Lectures, military history (recent), service of information and security, marches and camps. (Field Service and Infantry Drill Regulations.)

(155) Military Art 3a

**Practical**—Duties consistent with rank as cadet officers or non-commissioned officers in connection with the practical work and exercises laid down for the unit or units. Military sketching.

**Theoretical**—Minor tactics, field orders, map maneuvers, company administration general principles (papers and returns), military history.

Five hours.

Credit units 3½.

(156) Military Art 3b

**Practical**—Duties consistent with rank as cadet officers or non-commissioned officers in connection with the practical work and exercises laid down for the unit or units. Military sketching.

**Theoretical**—Minor tactics, map maneuvers, elements of international law, property accountability, method of obtaining supplies and equipment (Army Regulations.)

Five hours.

Credit units 3½.

(157) Military Art 4a

**Practical**—Duties consistent with rank as cadet officers or non-commissioned officers in connection with the practical work and exercises scheduled for the unit or units, military sketching.

**Theoretical**—Tactical problems, small forces, all arms combined, map maneuvers, court-martial proceedings. (Manual for Courts-Martial.)

Five hours.

Credit units 3½.

---

I. Required in Agriculture-Science Course.

II. Required in Mechanic Arts Course.

III. Required in Teacher Training Course in Agriculture.

IV. Required in Teacher Training Course in Home Economics.

All studies are elective to students of whom they are not required.

1 or A Freshman year                      2 or B Sophomore year

3 or C Junior year                          4 or D Senior year

a, c, or e First semester                      b, d, or f Second semester

Example: Agronomy 1a, I, III. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

(158)

**Military Art 4b**

**Practical**—Duties consistent with rank as cadet officers or non-commissioned officers in connection with the practical work and exercises scheduled for the unit or units, military sketching.

**Theoretical**—Tactical problems, map maneuvers, rifle in war. Lectures on military history and policy.

Five hours.

Credit units 3½.

(159)

**Physical Education I**

Directed exercises required of all male students during the Freshman year

Two hours.

Credit units 1.

Mr. —————.

(160)

**Physical Education A.**

Directed exercises required of all women students during the Freshman year.

Two hours.

Credit units 1.

Miss Wallace.

(161)

**Physical Education B.**

Directed exercises required of all women students during the Sophomore year.

Two hours.

Credit units 1.

Miss Wallace.

- 
- I. Required in Agriculture-Science Course.  
II. Required in Mechanic Arts Course.  
III. Required in Teacher Training Course in Agriculture.  
IV. Required in Teacher Training Course in Home Economics.  
All studies are elective to students of whom they are not required.
- |                           |                            |
|---------------------------|----------------------------|
| 1 or A Freshman year      | 2 or B Sophomore year      |
| 3 or C Junior year        | 4 or D Senior year         |
| a, c, or e First semester | b, d, or f Second semester |
- Example: Agronomy 1a, I, III,. The study is given in the Freshman year, first semester, and is required of students in the Agriculture-Science course and the Teacher Training Course in Agriculture.

# The School of Agriculture

---

Requirements as to admission, graduation, standing, attendance, military training may be found on pages 27, 28, 29, 30, and 31. Information as to expenses, loans, and employment may be found on pages 22, 23, 24, 25.

---

## SCHOOL COURSE IN AGRICULTURE.

### First Year.

First Semester	Second Semester
Title and Number	Title and Number
English 101 (183)	English 101 (183)
Animal Husbandry 101a (168)	Poultry Husbandry 101b (166)
Horticulture 101a (176)	Horticulture 101b (177)
Agronomy 101a (173)	Agronomy 101b (174)
Dairy Husbandry 101a (162)	Agricultural Engineering 101d (172)
Agricultural Engineering 101a (170)	Agricultural Engineering 101b (171)
Physical Education 1 (159)	Physical Education 1 (159)
Military Art 1a and Drill (151)	Military Art 1b and Drill (152)

### Second Year.

Public Speaking 102 (184)	Public Speaking 102 (184)
Botany 102a (180)	History 102b (185)
Chemistry 102a (182)	Entomology 102b (181)
Farm Management 102a (175)	Forestry 102b (179)
Dairy Husbandry 102a (163)	Military Art 2b and Drill (154)
Veterinary Science 102a (169)	Horticulture 102b (178)
Military Art 2a and Drill (153)	or
	Poultry Husbandry 102b (166)
	Dairy Husbandry 102b (164)
	or
	Dairy Husbandry 102d (165)



## SYNOPSIS OF SCHOOL STUDIES.

---

### (162) Dairy Husbandry 101a

**Farm Dairying**—A study of milk, its secretion, character, and composition; practice in testing milk with the Babcock test, the lactometer, and various acid tests; a study of hand power separators, their construction and method of running; practice in separating milk. Buttermaking, including methods of ripening cream, churning, washing, salting, and packing butter; general principles of cheese making with practice in making a few kinds of soft cheese. Ice cream making.

Two hours lecture.

Three hours laboratory.

Mr. Alger, Mr. Kuelling.

### (163) Dairy Husbandry 102a

**Animal Feeding**—A study of the composition and digestibility of feeding stuffs; computing rations for farm animals, including horses, cattle, sheep and swine; methods of feeding and caring for farm animals.

Three hours lecture.

Mr. Kuelling.

### (164) Dairy Husbandry 102b

**Market Dairying**—This is a study of approved methods of producing and handling milk for direct consumption; requirements of city boards of health and states for sanitary milk; rules and methods of inspection of dairy plants and milk depots; production of certified milk.

Two hours lecture.

Two hours laboratory.

Mr. Alger.

### (165) Dairy Husbandry 102d

**Dairy Herd Management**—A study of the origin, development and characteristics of the dairy breeds; methods of registration and requirements for advanced registry; selection, feeding and handling of the dairy calf, the bull, the heifer and mature cow, and problems of herd management. In laboratory, practice is given in scoring cattle and comparative judging of animals.

Three hours lecture.

Three hours laboratory.

Professor White and Mr. Kuelling.

(166) **Poultry Husbandry 101b**

**Poultry Culture**—A study of the poultry industry, the poultry farm, the breeds of poultry, selection and breeding, parasites and diseases, killing and dressing and marketing.

Two hours lecture.

Two hours laboratory

Mr. Warner.

(167) **Poultry Husbandry 102 b**

**Poultry Management**—The course continues and amplifies course 101b, which is prerequisite. It is designed to acquaint the student with the essential details of planning and managing commercial poultry plants.

Two hours lecture.

Two hours laboratory.

Mr. Warner.

(168) **Animal Husbandry 101a**

**Types and Breeds**—A study of types and breeds of horses, cattle, sheep and swine with special reference to their origin, history, development and characteristics. In laboratory a course in elementary judging is given. Text-book—Harper's "Animal Husbandry for Schools."

Two hours lecture.

Two hours laboratory.

Mr. Skinner.

(169) **Veterinary Science 102a**

Anatomy and physiology of the digestive and respiratory systems; special pathology; disease and treatment; a general study of the common diseases of domestic animals, with treatment that may be safely used by the herdsman; special diseases of the dairy cow and young calves; prevention and treatment of the common contagious and parasitic diseases; surgery, castration, dehorning, general care and treatment of wounds and injuries.

Two hours lecture.

Dr. Dow.

(170) **Agricultural Engineering 101a**

**Carpentry**—The use of carpenter's tools in bench work and building construction, the reading of working drawings and the estimation of bills of materials.

Three hours laboratory.

Mr. ———.

(171) **Agricultural Engineering 101b**

**Forging**—The forging of iron and steel, including repair work common on the farm.

Three hours laboratory.

Professor Fitts.

(172) **Agricultural Engineering 101d**

**Farm Machinery**—The use and repair of farm machinery and engines. A large number of machines and tools are available for practice work.

One hour lecture.

Four hours laboratory.

Mr. \_\_\_\_\_.

(173) **Agronomy 101a**

**Field Crop Production**—The growing and handling of corn, small grains, potatoes, tobacco and forage crops in New England. Much of the time is spent on the College Farm in actual practice work.

One hour lecture.

Four hours laboratory

Mr. Helmick.

(174) **Agronomy 101b**

**Soil Management**—The management of soils in relation to crop production; tillage and tillage problems; drainage; the use of manures, fertilizers and lime.

Two hours lecture.

Two hours laboratory.

Professor Slate.

(175) **Farm Management 102a**

**Farm Management**—A course dealing with farming as a business, studying the factors which determine the profitableness of the business by means of farm accounts, labor income records, etc., and combining these factors in the correct proportions for the organization and management of a farm.

Two hours lecture.

Two hours laboratory.

Mr. \_\_\_\_\_.

(176) **Horticulture 101a**

**Fruit Growing**—A course in general fruit growing for the home farm rather than as a commercial proposition. Location and arrangement of the orchard, selection of varieties, laying out and planting the trees, care of the young orchard. Pruning; spraying, fertilizing and cultivation of orchards; harvesting and handling the crop. A brief study of sprays and spraying machinery.

Two hours lecture.

Two hours laboratory.

Professor Hollister.

(177) **Horticulture 101b**

This course includes the divisions and foundations of horticulture; propagation of plants by various methods, seed inspection and identi-

fication, and seed germination; location and soils for market gardening and trucking, location and planning of home gardens; planting, cultivation, harvesting, storing and marketing of the principal vegetable crops.

One hour lecture.

Four hours laboratory.

Professor Stevens.

(178)

#### Horticulture 102b

**Commercial Fruit Growing**—This course will consider orchard work on a larger basis than the previous course and will help fit men to handle larger propositions. Subjects which will be considered are, laying out large orchards, purchasing the trees, equipment required, returns from different fruits, use of fillers, storage houses, etc. Pre requisite Horticulture 101a. (176)

One hour lecture.

Two hours laboratory.

Professor Hollister.

(179)

#### Forestry 102b

**Farm Woodlot**—A study will be made of the farm woodlot, including life history of the economic tree species, valuation survey, afforestation of waste areas, protection, harvesting, value of woodlot products, regeneration, and wood preservation on the farm.

Two hours lecture.

Three hours laboratory.

Mr. Moss.

(180)

#### Botany 102a

An elementary course in the structure, work, and systematic classification of plants, with special reference to economic forms.

Two hours lecture.

Four hours laboratory.

Mr. Torrey.

(181)

#### Entomology 102b

This course in entomology deals in an elementary way with the anatomy, classification and behavior of insects. Special emphasis is laid upon the life histories and control measures of the most important insect pests. Field trips are taken to enable the student to study types of insect injury and the insects causing the damage. The aim of the course is to enable the student to fight intelligently the many insect enemies found upon every farm.

Two hours lecture.

Two hours laboratory.

Mr. Manter.

(182) **Chemistry 102a**

This course is devoted to a careful study of the more important fundamental principles of inorganic chemistry and of the practical application of the science to the problems of every-day life.

Two hours lecture.

Four hours laboratory.

Mr. Hughes.

(183) **English 101**

This course aims to develop good English usage. Special attention will be given to the practical application of the principles of composition.

Three hours.

Miss Wallace.

(184) **Public Speaking 102**

This course will be fundamental work in the use of voice and body. There will be practical application of principles in speaking.

One hour.

Miss Wallace.

(185) **History 102b**

**History and Civics**—History of the United States with a special reference to political, industrial, and social institutions. Text: Thompson's "History of the United States" (Sanborn and Co.) with lectures on the Constitution.

Three hours.

Professor Monteith.

**List of Students Who Have Earned the Degree of Bachelor of Science  
in 1917-1918.**

**Class of 1918**

Alan Thacker Busby

Percil Lyman Sanford

Daniel Hart Horton

Adolph Gustave Tappert

Sanford Boughton Morse

Francis Benjamin Thompson

**Out of Course**

Paul Andrew Downs

Henry Dodge Munroe

James Alexander Gamble

Edward Lewis Newmarker

Russell Spencer Harris

**For Service in Arms**

**Class of 1918**

Thomas H. Beich

Charles A. Johnson

William H. Brown, Jr.

Harold N. Leffingwell

Louis H. Collin, Jr.

Adrian C. Marquardt

Elmer N. Dickinson

Allie W. Miller

Joseph R. Dillon

C. Edward Ryan

Walter L. Francis

Percy A. Sears

John H. Hildring

George D. Wiefert



**List of Students Who Have Earned the Diploma of the Two-Year  
School Course in Agriculture**

Burton Edward Callahan	Arthur James Randall
Ralph Elbert Fairchild	James Bernard Stuart
Burton Alpheus Leffingwell	George Albert Stumpf
Seward Haigh Manchester	Oscar Edward Swenson
Leslie Bartlett Moore	Clayton Edward Warner
Clifford Dennis Prentice	John Francis Wood

**List of Students Who Have Earned the Diploma of the Two-Year  
School Course in Home Economics**

Eva Alperin	Gertrude Ingaberg Benson
Christine Ermenia Beebe	Edna Elizabeth Parker
Edith Marie Anderson	

**List of Students Who Have Received War Certificates  
College of Agriculture**

**Class of 1919.**

Egbert J. Bailey	Harry A. Hopwood
Charles N. Burnham	Paul N. Manwaring
Earle W. Crampton	Thomas D. Mason
Albert G. Dahinden	Robert T. Mattoon
William B. Gerhardt	Arthur J. Reeve
Howard H. Gleason	Alfred E. Upham
Howard B. Goodrich	

**List of Students Who Have Received War Certificates  
College of Agriculture.**

**Class of 1920.**

L. Carl Alberti	John B. Musser
Arthur W. Frostholm	Norman H. Parcells
George P. Goodearl	Stanley I. Shafer
Crawford Griswold	Sidney L. Wheaton
George G. Kinnear	John L. Wright
John T. Lawson	

**School of Agriculture.**

**Class of 1918.**

Robert L. Chamberlain, Jr.
H. Gregory Hale
Horatio E. Maguire, Jr.
Whitney L. Marsh
Samuel R. Prentice

Senior Students Awarded Prizes for Scholarship at Commencement  
Exercises of 1918.

Sanford Boughton Morse

Percil Lyman Sanford

Honor Students for 1918.  
College.

Percil Lyman Sanford, 1918

Flora May Miller, 1920

Frank V. Williams, 1920

Gertrude Luddy, 1921

School of Agriculture.

Burton Alpheus Leffingwell, 1918

School of Home Economics.

Edna Elizabeth Parker, 1918

Honorary Degree of Master of Science.

George Marcellus Landers,

Chairman Committee of Food Supply and Conservation, Connecticut  
State Council of Defense.

Robert Scoville,

Federal Food Administrator for Connecticut.

---

Members of College and School in Military Service of the United States.

Ackerman, Ralph C.

Ackerman, Walter T.

Alberti, L. Carl

Allen, Willard H.

Anderson, Victor A.

Avery, Billings T., Jr.

Amory, Charles B.

Abell, Max F.

Bailey, Egbert J.

Bailey, Thomas R.

Ball, George I.

Barlow, Spencer W.

Barnard, Raymond H.

Barnes, Clark A.

Barton, James R.

Beauregard, Louis J.

Beich, Thomas H.

Beebe, Fred E.

Bourn, G. Winthrop, Jr.

Brock, Charles R.

Brown, Benjamin A.

Brown William H., Jr.

Buckingham, Charles W.

Buell, Albert A.

Burnham, Charles N.

Burwell, Lawrence K.

Busby A. Thacker

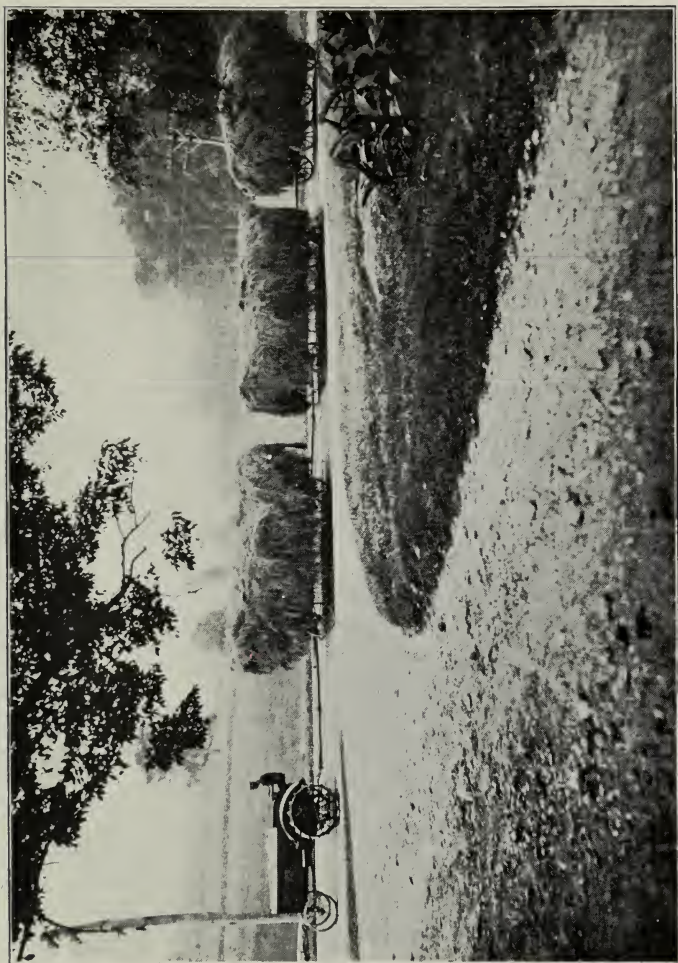
Cadwell, Murray K.

Cahill, Maurice R.

Card, Hubert V. W.

Carrier, William H. Jr.

Case, James R.



MODERN TRACTION



CENTRAL HEATING PLANT

Case, Marcius E.  
 Chamberlain, Robert L., Jr.  
 Chapman, Charles S.  
 Charter, LeGrand F.  
 Chipman, Truman J.  
 Christophers, Herlef  
 Clark, Walter T.  
 Cohen, Nathan A.  
 Collin, Louis H., Jr.  
 Crampton, Earle W.  
 Crawford, Bertram A.  
 Crompton, Harold M.  
 Crosby, Lincoln L.  
 Crowley, James L.  
 Curtis, Earle L.  
 Churchill, James M.  
 Dahinden, Albert G.  
 Deming, Edward L.  
 Dickinson, Elmer N.  
 Dillon, Joseph R.  
 Dooley, Donald V.  
 Downing, Theodore F.  
 Eddy, Robert C.  
 Ellis, Harold B.  
 Evans, Howard E.  
 Farnham, Elmer F.  
 Fellows, Imbert F.  
 Forbes, Alexander T.  
 Francis, Walter T.  
 Friedland, Fred E.  
 Frosthalm, Arthur W.  
 Fuller, Irving W.  
 Geehan, James A.  
 Gerhardt, William B.  
 Gillis, John W.  
 Gleason, Howard H.  
 Goodearl, George P.  
 Goodrich, Howard B.  
 Goodwin, Henry R.  
 Grant, Clarence J.  
 Gray, William H.  
 Griffin, Ralph R.  
 Griswold, Matthew H., M. D.  
 Griswold, Alfred H.  
 Griswold, Crawford  
 Griswold, Robert S., Jr.  
 Goodwin, Walton E.  
 Hale, H. Gregory  
 Hanks, Harris G.  
 Harris, Russell S.  
 Harvey, Samuel B.  
 Hauschild, Paul J.  
 Hastings, Frank W.  
 Healey, John B.  
 Henry, Ralph I.  
 Hilldring, John H.  
 Hoadley, Fred T.  
 Hodges, George B.  
 Homer, Willis H.  
 Hopwood, Harry A.  
 Horton, Daniel G.  
 Horton, D. Hart  
 Ivers, Charles H.  
 James, Raymond T.  
 Jewett, Henry D.  
 Johnson, Carl A.  
 Judd, Everett G.  
 Kaseowitz, Harold  
 Keating, Thomas F.  
 Kendall, Fred H.  
 Kilbride, Joseph B.  
 Kinnear, George G.  
 Knight, Rixford  
 Lamb, Matthew J.  
 Langdon, William P.  
 Lawrence, Leslie F.  
 Lawson, John T.  
 LeFebvre, Wilson L.  
 Leffingwell, Harold N.  
 Leroy, Bias W.  
 Leschke, Emil R.  
 Linehan, Joseph J.  
 Luther, Edwin M.  
 Lyons, Fred G.  
 Maguire, Horatio E., Jr.  
 Mallett, Alfred C.  
 Manning, Howard R.  
 Manwaring, Paul N.  
 Many, Raymond L.  
 Marsh, Herbert E.  
 Marsh, Whitney L.  
 Marquardt, Adrian C.  
 Mason, Thomas D.  
 Mattoon, Robert T.



McCall, Royce F.  
McCarthy, John T.  
McDonough, Frank A.  
McGann, Henry J.  
Mead, Sylvester W.  
Metcalf, Arthur B.  
Miller, Allie W.  
Mills, F. Stanley  
Miner, Leigh D.  
Moore, Earle R.  
Morgan, William A.  
Morse, Sanford B.  
Murdock, Edwin  
Musser, John B.  
Murphy, Desmond  
Meserve, Charles A.  
  
Nason, Fred G.  
Newmarker, Edward L.  
Nodine, Earle H.  
Nolan, Frank J.  
Norton, Julian H.

Oliver, Charles  
Oliver, Clinton  
Olsen, Edward A.

Palmer, Charles B.  
Parcells, Norman H.  
Patchen, Ernest H.  
Pattee, Wardner R.  
Peterson, Malcolm  
Plumley, Richard G.  
Prentice, Samuel R.  
Prindle, George L.

Randall, Elmer L.  
Ransom, J. Ford  
Rasmussen, Arnold R.  
Rasmussen, Ernest J.  
Reader, Charles H.  
Reeve, Arthur J.  
Renahan, Edward J.  
Ricketts, Jay S.  
Risley, Raymond M.  
Romans, Squire B.  
Roser, Martin L.  
Ryan, C. Edward

Sanford, J. Bartlett  
Samuels, Joseph

Schildgen, Frank J.  
Scofield, Frederick L.  
Schwartz, Paul L.  
Sears, Percy A.  
Seggel, Louis W.  
Senay, Charles T.  
Sexton, Karl E.  
Shafer, Stanley I.  
Shea, William D.  
Sherman, Roger B.  
Shurtleff, Dwight K.  
Smith, Robert McC.  
Smith, Walter B.  
Starr, Richard M.  
Stephenson, Arthur B.  
St. Germain, Albert E.  
Storrs, Benjamin P.  
Storrs, Richard E.  
Stretch, Eliot B.  
Suydam, George E., Jr.  
Simms, John A.  
Starr, Rev. Harris E.

Tappert, Adolph G.  
Terek, Andrew V.  
Thompson, Francis B.  
Tonry, Henry L.  
Tryon, Ralph G.  
Torrey, George S.

Ulrich, August C.  
Upham, Alfred E.  
Ungethuem, Walter J.

Vance, Robert J.  
Vibert, Horace C.

Warner, L. Havelock, Jr.  
Watrous, Clifford S.  
Watson, Arthur B.  
Webb, Arthur J.  
Wheaton, Sidney L.  
Wheeler, Noyes D.  
Wheelock, Charles T.  
Wildes, Willis P., Jr.  
Wood, James H.  
Wright, John L.  
Wright, Wilford H.  
Williams, Frank V.

Young, Merle R.

# Enrollment

---

## SENIOR CLASS

Barrett, Rollin Hayes .....	New London
Busby, Alan Thacker .....	Worcester, Mass.
Clark, Walter Thompson .....	Granby, Mass.
Dickinson, Elmer Newton .....	Glastonbury
Dillon, Joseph Raymond .....	Hartford
Edwards, Sidney Ackley .....	Naugatuck
Horne, Alton Irving .....	North Stonington
Horton, Daniel Hart .....	Brooklyn, N. Y.
Leffingwell, Harold Neale .....	Windham
Morse, Sanford Boughton .....	Syracuse, N. Y.
Sanford, Percil Lyman .....	Hadlyme
Tappert, Adolph Gustave .....	West Cheshire
Thompson, Francis Benjamin .....	Worcester, Mass.

## JUNIOR CLASS

Bird, Arthur Conrad .....	Waterbury
Bridges, Harold Burnett .....	Worcester, Mass.
Brock, Charles Raymond .....	Whitnéyville
Cassel, Lawrence Wells .....	Bridgeport
Clark, Helen Louise .....	Glenbrook
Crosby, Lincoln Luzerne .....	Manchester
Daggett, Gladys Viola .....	Moosup
Durham, George Benjamin .....	Roslindale, Mass.
Gerhardt, William Begg .....	Colchester
Hirsh, Donald Jacob .....	New York City
Mallet, Alfred Curtis .....	Stratford
Mattoon, Robert Treat .....	Woodmont
Moore, Earl Russell .....	Winsted
Moss, Eleanor Stowe .....	West Cheshire
Upham, Alfred Emmons .....	Waterbury
Wheeler, Noyes Denison .....	North Stonington
Wills, Carroll Dwight .....	Norwalk
Butler, Annette Stoddart .....	Greenwich

## SOPHOMORE CLASS

Alberti, Ludwig Carl .....	Dorchester, Mass.
Averill, Heman Perry .....	Washington Depot
Bailey, Harold Henry .....	Colchester
Bauer, Frederick .....	Newark, N. J.
Beers, John Frederick .....	Washington
Belden, Robert Fitch .....	Danbury
Bigger, John Henry .....	Bristol
Brigham, Earle Everett .....	Worcester, Mass.
Evans, Douglas Abbott .....	Danbury
Frostholm, Arthur William .....	Worcester, Mass.
Guilfoile, Loretto Weir.....	Waterbury
Goodearl, George Percival .....	West Acton, Mass.
Lawson, John Theodore .....	East Hartford
Lockwood, Harry Beecher .....	Watertown
Mahoney, Francis Joseph .....	Worcester, Mass.
Miller, Flora May .....	Clinton
Murphy, Thomas Francis .....	Worcester, Mass.
Neumann, Charles William .....	West Haven
Osborn, Minott Lowry .....	Woodbridge
Ryan, John Francis .....	Worcester, Mass.
Schimmel, William John Henry .....	Evergreen, N. Y.
Scott, Dwight Japy .....	Waterbury
Williams, Frank Vinton .....	Buckland
Wooding, Franklin Wheeler .....	North Haven
Wright, Herbert Willis .....	New Haven

## FRESHMAN CLASS

Alcott, George Bronson .....	Avon
Alexander, Newton Wellington .....	Waterbury
Austin, Carlton James .....	Weston, Vermont
Barry, Richard Edward .....	South Windsor
Bourn, George Winthrop, Jr.....	Templeton, Mass.
Brockett, Warren Edwin .....	Clintonville
Buell, Ruth Stannard .....	Clinton
Burghardt, Ruth Mildred .....	Interlaken, Mass.
Burke, William J. ....	Worcester, Mass.
Burrows, Ray Vincent .....	New London
Camp, Percy Arthur .....	Durham
Carpenter, Ernest Edwin .....	Hartford
Chapman, Webster Churchill .....	Hartford
Clark, Emerson Selden .....	East Hampton
Compton, Charles Chalmer .....	West Brattleboro, Vt.
Corey, William Bryan .....	New Milford
Cullen, William .....	New Britain
Cylkowski, Stella Ellen .....	Avon

Dodge, Margaret .....	Washington
Dow, Everett Duane .....	Hartford
Dow, Gardner .....	New Haven
Downs, Morris Seth .....	Danbury
Dwyer, Mary Frances.....	Waterbury
Fienemann, Henry William .....	Farmington
Gates, Donald White .....	East Hampton
Goodrich, James Stillman .....	Wethersfield
Graf, Daniel Aloysius .....	Stamford
Gronwoldt, William .....	North Germantown, N. Y.
Hallock, Agnes Marion .....	Washington Depot
Hartwell Chalmers Major .....	Watertown
Hayes, George D. ....	Winsted
Hutchison, Galen Otis .....	Passaic, N. J.
Johnson, John Peter .....	Shelton
Jaffe, David Harold .....	Passaic, N. J.
Kimball, Arthur E. ....	Danielson
Knott, Clarence Dewey .....	Worcester, Mass.
Larsen, Anna Marie .....	Greenwich
Lee, Vera Annis .....	Hartford
Lockwood, Maurice Herbert .....	New Britain
Lord, Edward A. ....	Waterbury
Luddy, Gertrude .....	New Britain
Maier, Frederick C. ....	Jamaica Plain, Mass.
Maloney, William Francis.....	Waterbury
Moss, Dorothy Marie .....	Naugatuck
Neumann, Harold Douglas .....	West Haven
Miller, George Dewey .....	Ivoryton
Olds, Harold Squires.....	South Manchester
Osborn, Evington Ansil .....	Hartford
Paul, Fred August .....	Waterbury
Pool, William Henry .....	Roslindale, Mass.
Prescott, Blake Daniels .....	Bethel
Prescott, Clifford R. ....	Milford
Quigg, William Fulton, Jr. ....	East Hampton
Schenker, Andrew .....	Wallingford
Schmidt, Norman Louis .....	Hartford
Seymour, Rudolph Morris .....	Ridgefield
Shapiro, Israel .....	Hartford
Sherman, Edward Rand .....	South Norwalk
Simonson, Alice May .....	Seymour
Skoglund, Carl Edwin .....	Willimantic
Small, Carl Moses .....	Haverhill, Mass.
Smith, Salome Case .....	Hartford
Sniffin, Charles Rice .....	Rowayton
Spencer, William Leonard.....	Quincy, Mass.
Schoolnick, Rose .....	Hartford
Taylor, John Collins .....	Bloomfield, N. J.
Wallace, Perry Hewson .....	Rockfall
Ward, Samuel Israel .....	Hartford
Woodford, Harold Lester .....	Bloomfield



3 0112 105620238

## SPECIAL STUDENTS

Borovicka, Josephine .....	Storrs
Davis, Mrs. Alice S. ....	Storrs
Gould, Louise Elizabeth .....	Storrs
Harvey, John Bayer .....	Willimantic
Heid, George .....	Jersey City, N. J.
Muldoon, William Joseph .....	New Haven
Nutting, Marion .....	Westminster, Vt.
Quick, Minnie Boyce .....	Watertown
Shulman, Emanuel .....	New London
Wheeler, Gladys .....	Storrs

## POST-GRADUATE STUDENTS

Downs, Paul Andrew .....	Storrs
Munroe, Henry Dodge .....	Brockton, Mass.

## Second Year

Alperin, Eva .....	Mansfield
Anderson, Edith Marie .....	Brookfield Center
Bandy, Nellie Hazel .....	Mystic
Beebe, Christine Ermenia .....	Storrs
Benson, Gertrude Ingaberg .....	South Willington
Callahan, Burton Edward .....	Wethersfield
Fairchild, Ralph Elbert .....	Meriden
Leffingwell, Burton Alpheus .....	Canaan
Liskovec, Frank .....	South Willington
Luce, Bartlett Bayeux .....	Mount Vernon, N. Y.
Maguire, Horatio Eucibus, Jr. ....	Bayonne, N. J.
Manchester, Seward Haigh .....	Winsted
McFetridge, Henry .....	Hartford
Merriman, Irving Howard .....	Waterbury
Moore, Leslie Bartlett .....	Winsted
Parker, Edna Elizabeth .....	Mansfield
Prentice, Clifford Dennis .....	North Haven
Randall, Arthur James .....	Yantic
Stuart, James Bernard .....	Lakeville
Stumpf, George Albert .....	Burnside
Swenson, Oscar Edward .....	Newark, N. J.
Warner, Clayton Edward .....	Waterbury
Wood, John Francis .....	Somersville

## First Year

Abel, George .....	Cromwell
Barrows, Charles Keeney .....	New Haven
Beisiegel, Herbert Burdette .....	Woodbridge